

EXHIBIT 1

1
2 UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

3 ----- X
4 NATIONAL ASSOCIATION FOR
THE ADVANCEMENT OF
5 COLORED PEOPLE,
6 SPRING VALLEY BRANCH, et al.,
7 Plaintiffs,
vs. No.
7:17-cv-08943

8
9 EAST RAMAPO CENTRAL
SCHOOL DISTRICT, et al.,
10 Defendants.

----- X

11
12 February 6, 2018
13 10:07 a.m.

14
15
16 Deposition of STEVEN P.
17 COLE, Ph.D., held at the offices of
18 Morgan, Lewis & Bockius LLP, 101 Park
19 Avenue, New York, New York, pursuant to
20 Notice, before Theresa Tramondo, AOS, CLR,
21 a Notary Public of the State of New York.

22
23 Reported by:
24 THERESA TRAMONDO, AOS, CLR
25 JOB NO. PA2808166

<p style="text-align: right;">Page 2</p> <p>1 2 APPEARANCE OF COUNSEL: 3 4 FOR PLAINTIFFS and 5 STEVEN P. COLE, Ph.D. 6 LATHAM & WATKINS LLP 7 885 Third Avenue 8 New York, New York 10022-4834 9 BY: COREY A. CALABRESE, ESQ. 10 Corey.calabrese@lw.com 11 212-9061200 12 13 FOR PLAINTIFFS and 14 STEVEN P. COLE, Ph.D.: 15 NEW YORK CIVIL LIBERTIES UNION 16 125 Broad Street 17 New York, New York 10004 18 BY: PERRY GROSSMAN, ESQ. 19 Pgrossman@nyclu.org 20 212-607-3347 21 22 23 24 Veritext Legal Solutions Mid-Atlantic Region 1250 Eye Street NW - Suite 350 25 Washington, D.C. 20005</p>	<p style="text-align: right;">Page 4</p> <p>1 2 STIPULATIONS 3 4 5 IT IS HEREBY STIPULATED AND AGREED, 6 by and among counsel for the respective 7 parties hereto, that the filing, 8 sealing and certification of the within 9 deposition shall be and the same are 10 hereby waived; 11 IT IS FURTHER STIPULATED AND AGREED 12 that all objections, except as to form 13 of the question, shall be reserved to 14 the time of the trial; 15 IT IS FURTHER STIPULATED AND AGREED 16 that the within deposition may be signed 17 before any Notary Public with the same 18 force and effect as if signed and sworn to 19 before the Court. 20 21 22 23 24 25</p>
<p style="text-align: right;">Page 3</p> <p>1 2 APPEARANCE OF COUNSEL (CONT'D): 3 4 FOR DEFENDANT EAST RAMAPO CENTRAL SCHOOL 5 DISTRICT: 6 MORGAN, LEWIS & BOCKIUS LLP 7 1111 Pennsylvania Avenue, NW 8 Washington, D.C. 20004-2541 9 BY: RANDALL M. LEVINE, ESQ. 10 DAVID J. BUTLER, ESQ. 11 ADAM ADLER, ESQ. 12 Randall.levine@morganlewis.com 13 David.butler@morganlewis.com 14 Adam.adler@morganlewis.com 15 202-373-6541 16 17 FOR DEFENDANT COMMISSIONER MARYELLEN ELIA: 18 STATE OF NEW YORK OFFICE OF THE 19 ATTORNEY GENERAL ERIC T. SCHNEIDERMAN 20 120 Broadway 21 New York, New York 10271-0332 22 BY: MONICA A. CONNELL, ESQ. 23 Monica.connell@ag.ny.gov 24 212-416-8965 25</p>	<p style="text-align: right;">Page 5</p> <p>1 2 BY THE COURT REPORTER: 3 Q. Please state your full name for 4 the record. 5 A. Steven Parker Cole, Ph.D. 6 Q. What is your address? 7 A. Business address, 1315 Baptist 8 Church Road, Yorktown Heights, New York 9 10598 and 721 E. Ponce de Leon Avenue, 10 Decatur, Georgia 30030. 11 STEVEN P COLE, Ph D, 12 called as a witness, having been duly 13 sworn by a Notary Public, was examined and 14 testified as follows: 15 EXAMINATION BY 16 MR. LEVINE: 17 Q. Good morning. We are on the 18 record. My name is Randall Levine. I am an 19 attorney. I represent the defendant in this 20 case, East Ramapo Central School District. 21 Would you please state your full 22 name for the record. 23 A. Steven Parker Cole. 24 Q. Dr. Cole, is that the right form 25 of address?</p>

<p style="text-align: right;">Page 6</p> <p>1 Cole</p> <p>2 A. It is.</p> <p>3 Q. Dr. Cole, you have been deposed</p> <p>4 before, right?</p> <p>5 A. I have.</p> <p>6 Q. Well, then we will just refresh</p> <p>7 on the ground rules.</p> <p>8 If you have any questions,</p> <p>9 please ask. Today your answers will be</p> <p>10 given under oath, subject to penalties of</p> <p>11 perjury as if you were testifying in a</p> <p>12 courtroom. Do you understand that?</p> <p>13 A. I do.</p> <p>14 Q. If you don't understand any of</p> <p>15 my questions today, either in whole or in</p> <p>16 part, please just tell me, and I will</p> <p>17 rephrase the question. If you don't ask me</p> <p>18 to rephrase the question, then I will assume</p> <p>19 you understood the question. Do you</p> <p>20 understand?</p> <p>21 A. I do.</p> <p>22 Q. There may be times today when in</p> <p>23 the middle of a question counsel for one of</p> <p>24 the parties may object. That is not an</p> <p>25 instruction to you not to answer the</p>	<p style="text-align: right;">Page 8</p> <p>1 Cole</p> <p>2 deposition today you need to take a break,</p> <p>3 that is perfectly fine. I would just ask</p> <p>4 that you wait until I finish a question and</p> <p>5 provide an answer to a question and then we</p> <p>6 can take a break. Do you understand?</p> <p>7 A. I do.</p> <p>8 Q. Did you drink any alcohol prior</p> <p>9 to coming here this morning?</p> <p>10 A. No.</p> <p>11 Q. Did you take any medications</p> <p>12 prior to coming here this morning?</p> <p>13 A. Just throat lozenges.</p> <p>14 Q. Are you currently being treated</p> <p>15 for any illness that would prevent you from</p> <p>16 answering questions fully and truthfully</p> <p>17 today?</p> <p>18 A. No.</p> <p>19 Q. Is there any other reason you</p> <p>20 can think of why you might not be able to</p> <p>21 give accurate and truthful answers to my</p> <p>22 questions?</p> <p>23 A. I don't.</p> <p>24 Q. Very good.</p> <p>25 Before we move on to the next</p>
<p style="text-align: right;">Page 7</p> <p>1 Cole</p> <p>2 question. Do you understand?</p> <p>3 A. I do.</p> <p>4 Q. Are you represented by counsel</p> <p>5 today?</p> <p>6 A. I have counsel here who</p> <p>7 represent the school district. I -- I</p> <p>8 actually don't understand the question.</p> <p>9 Q. Let's clarify it. You have been</p> <p>10 retained to serve as an expert in this case,</p> <p>11 correct?</p> <p>12 A. Correct.</p> <p>13 Q. You have been retained by a law</p> <p>14 firm to provide an opinion in this case,</p> <p>15 correct?</p> <p>16 A. Correct.</p> <p>17 Q. Who retained you?</p> <p>18 A. I was retained by Latham &</p> <p>19 Watkins and New York Civil Liberties Union.</p> <p>20 Q. Are the attorneys from the NYCLU</p> <p>21 here today with you to serve in the capacity</p> <p>22 as counsel for the plaintiffs?</p> <p>23 A. Correct.</p> <p>24 Q. Very good.</p> <p>25 If at any point during the</p>	<p style="text-align: right;">Page 9</p> <p>1 Cole</p> <p>2 piece, do you have any questions for me</p> <p>3 about the deposition?</p> <p>4 A. I don't.</p> <p>5 MR. LEVINE: I'm going to mark a</p> <p>6 document as Cole Exhibit 1.</p> <p>7 (Cole Exhibit 1, Curriculum</p> <p>8 vitae of Steven P. Cole, Ph.D., dated</p> <p>9 December 2017, marked for</p> <p>10 identification, as of this date.)</p> <p>11 Q. I note it's marked on the first</p> <p>12 page "Exhibit 2." That's not the deposition</p> <p>13 exhibit number.</p> <p>14 Take a moment to look at the</p> <p>15 document and familiarize yourself with it.</p> <p>16 The document marked as Cole</p> <p>17 Exhibit 1, do you recognize that document?</p> <p>18 A. It has Cole Exhibit 2 on the</p> <p>19 tab.</p> <p>20 Q. Do you recognize the document</p> <p>21 that we've marked as Cole Exhibit 1?</p> <p>22 A. I do.</p> <p>23 Q. Is this your CV?</p> <p>24 A. It is.</p> <p>25 Q. To the best of your knowledge,</p>

<p style="text-align: right;">Page 10</p> <p>1 Cole</p> <p>2 is this CV fully up to date?</p> <p>3 A. It's dated December 2017. I</p> <p>4 would like to update it. There is a change</p> <p>5 since December.</p> <p>6 Q. All right. There is something</p> <p>7 you would like to add to your CV; is that</p> <p>8 correct?</p> <p>9 A. Not to add to it. Just change a</p> <p>10 date.</p> <p>11 Q. There is at least one change you</p> <p>12 would like to make to the CV?</p> <p>13 A. It's the only one I'm aware of,</p> <p>14 yes.</p> <p>15 Q. What's the change?</p> <p>16 A. On page 26 under "Publications</p> <p>17 and Papers," this article on depression was</p> <p>18 accepted by the Journal of Affective</p> <p>19 Disorders. It went into press in December.</p> <p>20 It's now available online. It has been</p> <p>21 published, and it will be out on paper in a</p> <p>22 few months.</p> <p>23 Q. Any other changes to this CV</p> <p>24 that you are aware of as you sit here today?</p> <p>25 A. Not that I'm aware of.</p>	<p style="text-align: right;">Page 12</p> <p>1 Cole</p> <p>2 actually participate in taking samples, so</p> <p>3 data collection, I do data analysis, report</p> <p>4 writing, and communication with coauthors.</p> <p>5 Q. Are you an expert in alpaca</p> <p>6 manure?</p> <p>7 A. I actually am.</p> <p>8 Q. Is that a veterinary expertise?</p> <p>9 A. No. I actually live on a farm</p> <p>10 and have alpacas, so I'm very experienced</p> <p>11 with manure, and have been concerned about</p> <p>12 alpaca and llama farmers using composted</p> <p>13 manure for gardens and farms knowing that</p> <p>14 the animals are medicated.</p> <p>15 So the purpose of the study is</p> <p>16 to document how long it takes for the drug</p> <p>17 to leave the animal and then once it's</p> <p>18 composted to study how long or to study the</p> <p>19 degradation rates of the drug in the</p> <p>20 composted manure.</p> <p>21 Q. That project you're working on</p> <p>22 is continuing through to the present,</p> <p>23 correct?</p> <p>24 A. Correct.</p> <p>25 Q. Let's move down to the next</p>
<p style="text-align: right;">Page 11</p> <p>1 Cole</p> <p>2 Q. Turning to the very first page</p> <p>3 of the document, which is labeled at the top</p> <p>4 "Page 2 of 38," under "Experience" you have</p> <p>5 listed as the first entry, "2016 to Present,</p> <p>6 a role as primary investigator, Northeast</p> <p>7 Sustainable Agriculture Research and</p> <p>8 Education Grant, University of Vermont,</p> <p>9 Residual Doramectin in alpaca manure</p> <p>10 compost."</p> <p>11 What is that role that you're</p> <p>12 serving in in that entry?</p> <p>13 A. I'm the primary investigator.</p> <p>14 Q. What is residual Doramectin in</p> <p>15 alpaca manure?</p> <p>16 A. Alpacas east of the Mississippi</p> <p>17 River are prone to a parasite, a meningeal</p> <p>18 worm, a brain worm, and in order to prevent</p> <p>19 severe neurological issues, they're injected</p> <p>20 monthly with a medication Doramectin.</p> <p>21 Q. What do you do as the primary</p> <p>22 investigator?</p> <p>23 A. I -- as a primary investigator,</p> <p>24 I applied -- I was the lead author on a</p> <p>25 grant proposal. I designed the study. I</p>	<p style="text-align: right;">Page 13</p> <p>1 Cole</p> <p>2 entry "2012 to Present, adjunct professor,</p> <p>3 Department of Theater and Dance, Emory</p> <p>4 University, Atlanta, Georgia." Does that</p> <p>5 entry mean that you're a dance teacher?</p> <p>6 A. No.</p> <p>7 Q. So what do you do as an adjunct</p> <p>8 professor of the Department of Theater and</p> <p>9 Dance?</p> <p>10 A. I provide research consultations</p> <p>11 to the department.</p> <p>12 Q. Of what nature?</p> <p>13 A. With respect to designing</p> <p>14 experiments, designing research, developing</p> <p>15 measurement tools, statistical analysis and</p> <p>16 support in writing up the results for</p> <p>17 publications.</p> <p>18 Q. How does that work relate to</p> <p>19 theater and dance? What are you studying?</p> <p>20 A. An example of studying in that</p> <p>21 program would be analyzing the effect of</p> <p>22 dancing or teaching dance in front of</p> <p>23 mirrors, what effect does that have on the</p> <p>24 body image of female ballet dancers.</p> <p>25 Q. That began in 2012 continuing</p>

<p style="text-align: right;">Page 14</p> <p>1 Cole</p> <p>2 through to the present, correct; is it one</p> <p>3 study or multiple studies?</p> <p>4 MR. GROSSMAN: Objection.</p> <p>5 Q. The first question is: 2012</p> <p>6 continuing to the present, correct?</p> <p>7 A. Correct.</p> <p>8 Q. Have you conducted a single</p> <p>9 study with the Theater and Dance Department</p> <p>10 at Emory?</p> <p>11 A. No. It has been more than one</p> <p>12 study.</p> <p>13 Q. Let's move on to the next one,</p> <p>14 "1993 to Present, adjunct professor,</p> <p>15 Department of Psychology, Emory University,</p> <p>16 Atlanta, Georgia." What is your primary</p> <p>17 field of study as a psychology professor?</p> <p>18 A. There are two primary areas;</p> <p>19 research, design and statistics, and the</p> <p>20 second area would be perception and memory.</p> <p>21 Q. Let's start with the first.</p> <p>22 What in particular -- the research, design</p> <p>23 and statistics, how does that relate to the</p> <p>24 discipline of psychology?</p> <p>25 A. There is an area of psychology</p>	<p style="text-align: right;">Page 16</p> <p>1 Cole</p> <p>2 formal classes in statistics. I do invited</p> <p>3 presentations about statistical analysis.</p> <p>4 Q. Have you taught formal classes</p> <p>5 in statistics?</p> <p>6 A. I have.</p> <p>7 Q. When was the last time you</p> <p>8 taught formal classes in statistics?</p> <p>9 A. That would have been 1995.</p> <p>10 Q. Where did you teach statistics</p> <p>11 classes in 1995?</p> <p>12 A. The Atlanta University Center.</p> <p>13 Q. What is that?</p> <p>14 A. That is a consortium of</p> <p>15 historically Black colleges and universities</p> <p>16 in Atlanta like Morehouse.</p> <p>17 Q. That class, was it an</p> <p>18 undergraduate class?</p> <p>19 A. Yes.</p> <p>20 Q. For how many semesters did you</p> <p>21 teach that class ballpark?</p> <p>22 A. Approximately ten.</p> <p>23 Q. Have you ever published a peer</p> <p>24 review article on statistical analysis?</p> <p>25 A. I have published peer review</p>
<p style="text-align: right;">Page 15</p> <p>1 Cole</p> <p>2 that focuses on designing research,</p> <p>3 designing measurement tools, and in</p> <p>4 statistical analysis of the data that's an</p> <p>5 area of psychology that I studied and have</p> <p>6 expertise and provide consultation to the</p> <p>7 department on.</p> <p>8 Q. Do have formal training in</p> <p>9 statistical analysis?</p> <p>10 A. I do.</p> <p>11 Q. Can you tell me the nature of</p> <p>12 your formal training with statistical</p> <p>13 analysis?</p> <p>14 A. It began as an undergraduate at</p> <p>15 the University of Virginia, continued in my</p> <p>16 graduate studies at Columbia and expanded</p> <p>17 when I was a graduate student at Emory.</p> <p>18 Q. Do you teach any statistics</p> <p>19 classes?</p> <p>20 A. I need you to get more specific</p> <p>21 about your question. You used the words,</p> <p>22 "do you"; are you talking currently?</p> <p>23 Q. Yes. Currently do you teach any</p> <p>24 statistics classes?</p> <p>25 A. At this point I'm not teaching</p>	<p style="text-align: right;">Page 17</p> <p>1 Cole</p> <p>2 articles that deal with statistical</p> <p>3 analysis, yes.</p> <p>4 Q. Just so I understand, are you</p> <p>5 saying that you have published peer review</p> <p>6 articles in which you used statistical</p> <p>7 analysis?</p> <p>8 A. Certainly used, and in some</p> <p>9 articles go beyond just using.</p> <p>10 Q. What do you mean by that?</p> <p>11 A. I mean qualifying the analyses,</p> <p>12 critiquing other analyses and moving the</p> <p>13 field forward with the analyses.</p> <p>14 Q. Have you been retained to serve</p> <p>15 as an expert witness in a Voting Rights Act</p> <p>16 case before now?</p> <p>17 A. Yes.</p> <p>18 Q. Have you been retained to serve</p> <p>19 as an expert witness in a Voting Rights Act</p> <p>20 case involving Section 2 of the Voting</p> <p>21 Rights Act?</p> <p>22 A. Yes.</p> <p>23 Q. When was the last time you</p> <p>24 served as an expert witness in a Section 2</p> <p>25 case?</p>

<p style="text-align: right;">Page 18</p> <p>1 Cole</p> <p>2 A. You'll have to clarify what you</p> <p>3 mean by "expert witness."</p> <p>4 Q. I mean by "expert witness" that</p> <p>5 you were retained for the purpose of</p> <p>6 testifying about your professional opinion</p> <p>7 in court.</p> <p>8 A. Okay, could you repeat the prior</p> <p>9 question then?</p> <p>10 Q. Sure.</p> <p>11 When was the last time you were</p> <p>12 retained to serve as an expert witness in a</p> <p>13 Section 2 case?</p> <p>14 A. Three years ago.</p> <p>15 Q. What was the name of that case?</p> <p>16 A. Voketz versus City of Decatur.</p> <p>17 Q. What were you retained to opine</p> <p>18 on in that case?</p> <p>19 A. Racially polarized voting.</p> <p>20 Q. Did you testify in that case?</p> <p>21 A. No.</p> <p>22 Q. Did you draft a report for that</p> <p>23 case?</p> <p>24 A. I did.</p> <p>25 Q. Do you know if that report was</p>	<p style="text-align: right;">Page 20</p> <p>1 Cole</p> <p>2 A. I have.</p> <p>3 Q. Before the Decatur case, what is</p> <p>4 the most recent Section 2 case that you</p> <p>5 served as an expert witness in?</p> <p>6 A. I'm going to ask you to clarify</p> <p>7 what you mean by "case"?</p> <p>8 Q. A litigation in state or federal</p> <p>9 court.</p> <p>10 A. Are you assuming that a case has</p> <p>11 been filed by that question?</p> <p>12 Q. Yes. By that question I am</p> <p>13 asking actual filed litigation for which you</p> <p>14 were retained to serve as an expert witness.</p> <p>15 A. That would be Large versus</p> <p>16 Fremont County.</p> <p>17 Q. When were you retained to serve</p> <p>18 as an expert in that case?</p> <p>19 A. Approximately ten years ago.</p> <p>20 Q. Did you testify?</p> <p>21 A. Yes.</p> <p>22 Q. Did you testify in court in that</p> <p>23 case?</p> <p>24 A. I did.</p> <p>25 Q. Is that case ongoing?</p>
<p style="text-align: right;">Page 19</p> <p>1 Cole</p> <p>2 filed in court?</p> <p>3 A. I believe it was.</p> <p>4 Q. Were you deposed in that case?</p> <p>5 A. I was not.</p> <p>6 Q. Do you know whether that case</p> <p>7 was resolved?</p> <p>8 MR. GROSSMAN: Objection.</p> <p>9 Q. Do you know whether that case is</p> <p>10 ongoing?</p> <p>11 A. It's ongoing.</p> <p>12 Q. Do you recall -- for that case</p> <p>13 if I call it the "Decatur case," will you</p> <p>14 know what I mean?</p> <p>15 A. We can agree on that, sure.</p> <p>16 Q. In the Decatur case, were you</p> <p>17 retained to perform statistical analysis?</p> <p>18 A. Yes.</p> <p>19 Q. What statistical analysis</p> <p>20 techniques did you perform?</p> <p>21 A. Homogenous precinct analysis,</p> <p>22 correlational analysis, bivariate ecological</p> <p>23 regression and ecological inference.</p> <p>24 Q. Have you served as an expert</p> <p>25 witness in any other Section 2 cases?</p>	<p style="text-align: right;">Page 21</p> <p>1 Cole</p> <p>2 A. No.</p> <p>3 Q. Do you know how that case was</p> <p>4 resolved?</p> <p>5 A. I know how it was resolved at</p> <p>6 the federal district level.</p> <p>7 Q. How was that case resolved at</p> <p>8 the federal district level?</p> <p>9 A. The Court decided in favor of</p> <p>10 the plaintiff.</p> <p>11 Q. Were you retained by the</p> <p>12 plaintiffs in the Fremont case?</p> <p>13 A. I was.</p> <p>14 Q. How about the Decatur case, were</p> <p>15 you retained by the plaintiffs?</p> <p>16 A. No.</p> <p>17 Q. Who were you retained by in the</p> <p>18 Decatur case?</p> <p>19 A. The City of Decatur.</p> <p>20 Q. Is the City of Decatur the</p> <p>21 defendant in the Decatur case?</p> <p>22 A. I believe so.</p> <p>23 Q. Turning back to the Decatur</p> <p>24 case, what was your opinion that you offered</p> <p>25 in the Decatur case?</p>

<p style="text-align: right;">Page 22</p> <p>1 Cole</p> <p>2 MR. GROSSMAN: Objection.</p> <p>3 Q. If you understand, you can</p> <p>4 answer.</p> <p>5 A. Can you get more specific with</p> <p>6 your question?</p> <p>7 Q. Yes.</p> <p>8 Did you opine in the Decatur</p> <p>9 case, did you opine that elections were</p> <p>10 racially polarized?</p> <p>11 A. I did.</p> <p>12 Q. In the Fremont case, did you</p> <p>13 opine that elections were racially</p> <p>14 polarized?</p> <p>15 A. I did.</p> <p>16 Q. Ballpark, how many Section 2</p> <p>17 cases have you worked on as an expert</p> <p>18 witness?</p> <p>19 A. Approximately 30.</p> <p>20 Q. In each of those cases, did you</p> <p>21 opine on whether elections are racially</p> <p>22 polarized?</p> <p>23 A. I believe so.</p> <p>24 Q. Have you ever concluded in your</p> <p>25 role as an expert witness that elections</p>	<p style="text-align: right;">Page 24</p> <p>1 Cole</p> <p>2 A. That's right.</p> <p>3 Q. Explain that. What do you mean</p> <p>4 by that?</p> <p>5 A. I might be retained as a</p> <p>6 consultant to examine some jurisdiction to</p> <p>7 assess whether voting is racially polarized</p> <p>8 there, and in some of those situations, I</p> <p>9 might find that racially polarized voting</p> <p>10 was not present in general.</p> <p>11 Q. Have you ever determined that</p> <p>12 there was not racially polarized voting in</p> <p>13 that context as a consultant?</p> <p>14 A. Yes.</p> <p>15 Q. How many times?</p> <p>16 A. This is going to have to be a</p> <p>17 rough guess.</p> <p>18 Q. Okay.</p> <p>19 About how many times?</p> <p>20 A. You know, I actually -- this is</p> <p>21 really a rough guess. So I'd say 10 to 15</p> <p>22 times. 10 to 15 times perhaps.</p> <p>23 Q. Do you recall any specific</p> <p>24 instance?</p> <p>25 A. I don't.</p>
<p style="text-align: right;">Page 23</p> <p>1 Cole</p> <p>2 were not racially polarized?</p> <p>3 A. Yes.</p> <p>4 Q. In what case was that?</p> <p>5 A. I should have asked you to</p> <p>6 clarify the prior question. You didn't say</p> <p>7 "case." You asked if I ever had opined --</p> <p>8 could you ask the question again?</p> <p>9 Q. Sure.</p> <p>10 In all of the cases for which</p> <p>11 you have served as an expert witness, have</p> <p>12 you ever opined that elections were not</p> <p>13 racially polarized?</p> <p>14 A. Assuming that you mean a case</p> <p>15 that has actually been filed?</p> <p>16 Q. Yes.</p> <p>17 A. Okay. In those cases I've</p> <p>18 always testified that voting was in general</p> <p>19 racially polarized.</p> <p>20 Q. That's about 30 cases, right?</p> <p>21 A. We can count them up in the CV,</p> <p>22 but that's an approximation.</p> <p>23 Q. Sometimes you serve as an expert</p> <p>24 in connection with cases that haven't been</p> <p>25 filed; is that right?</p>	<p style="text-align: right;">Page 25</p> <p>1 Cole</p> <p>2 Q. Do you recall when the last time</p> <p>3 you were retained as a consultant and found</p> <p>4 that there was not racially polarized</p> <p>5 voting?</p> <p>6 A. More than 15 years ago.</p> <p>7 Q. 20 years ago?</p> <p>8 A. Sure.</p> <p>9 Q. Again, ballpark figure, how many</p> <p>10 times have you served as a consultant in</p> <p>11 Section 2 cases where no litigation has</p> <p>12 actually been filed?</p> <p>13 A. Approximately 20 times.</p> <p>14 Q. So is it accurate to say that</p> <p>15 your best recollection is that maybe 10 or</p> <p>16 15 of those 20 times you concluded that</p> <p>17 there was not racially polarized voting?</p> <p>18 A. I would say about half, about</p> <p>19 half the time.</p> <p>20 Q. But you can't recall any</p> <p>21 specific instance where that occurred?</p> <p>22 A. I can't.</p> <p>23 Q. Can you recall any specific</p> <p>24 instance when you acted as a consultant and</p> <p>25 did find racially polarized voting?</p>

<p style="text-align: right;">Page 26</p> <p>1 Cole</p> <p>2 A. Do you want to expand that</p> <p>3 question? The way it's phrased, it's pretty</p> <p>4 broad.</p> <p>5 Q. Of the 20 or so times in which</p> <p>6 you have served as a consultant, do you</p> <p>7 recall any of the specific instances when</p> <p>8 you opined that there was racially polarized</p> <p>9 voting in the jurisdiction?</p> <p>10 A. I can't remember a specific</p> <p>11 instance.</p> <p>12 Q. Does your CV list the retentions</p> <p>13 as a consultant in unfiled cases?</p> <p>14 A. It will list the organizations</p> <p>15 that retained me.</p> <p>16 Q. Could you show me one?</p> <p>17 A. Sure. On page 8, half the way</p> <p>18 down, Florida Rural Legal Services.</p> <p>19 Q. Do you recall, when you were</p> <p>20 retained by Florida Rural Legal Services,</p> <p>21 you opined that there was racially polarized</p> <p>22 voting in the jurisdiction you were asked to</p> <p>23 analyze?</p> <p>24 A. Could you repeat the question?</p> <p>25 Q. What did you conclude for</p>	<p style="text-align: right;">Page 28</p> <p>1 Cole</p> <p>2 analyze in February of 2017?</p> <p>3 A. Some data I was provided and</p> <p>4 some I found on my own.</p> <p>5 Q. Did you begin your analysis in</p> <p>6 February 2017?</p> <p>7 A. It may have taken a while before</p> <p>8 I actually began doing analyses.</p> <p>9 Q. Did you start work in February</p> <p>10 2017?</p> <p>11 A. Yes.</p> <p>12 Q. You bill by the hour for your</p> <p>13 work on this case, correct?</p> <p>14 A. Correct.</p> <p>15 Q. At \$150 an hour; is that right?</p> <p>16 A. Yes.</p> <p>17 Q. Do you record your time entries</p> <p>18 when you work on this case?</p> <p>19 A. I do.</p> <p>20 Q. Have you recorded your time</p> <p>21 since February 2017?</p> <p>22 A. Yes.</p> <p>23 Q. Do you know how many hours so</p> <p>24 far you have worked on the case?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 27</p> <p>1 Cole</p> <p>2 Florida Rural Legal Services?</p> <p>3 A. I don't recall specifics. There</p> <p>4 were a number of projects there. I don't</p> <p>5 remember the specifics.</p> <p>6 Q. Do you recall what they asked</p> <p>7 you to opine on?</p> <p>8 A. Racially polarized voting.</p> <p>9 Q. Do you recall what you opined?</p> <p>10 A. I don't.</p> <p>11 Q. Okay. Let's switch gears a bit</p> <p>12 and bring ourselves up to the present.</p> <p>13 When were you retained to serve</p> <p>14 as an expert witness for purposes of this</p> <p>15 case?</p> <p>16 MR. GROSSMAN: Objection.</p> <p>17 A. February of 2017.</p> <p>18 Q. What were you retained to do in</p> <p>19 February of 2017?</p> <p>20 A. To explore racially polarized</p> <p>21 voting in East Ramapo Central School</p> <p>22 District.</p> <p>23 Q. What do you mean by "explore"?</p> <p>24 A. Do some analyses.</p> <p>25 Q. Were you provided data to</p>	<p style="text-align: right;">Page 29</p> <p>1 Cole</p> <p>2 Q. How many hours have you worked</p> <p>3 on the case?</p> <p>4 A. Approximately 140.</p> <p>5 Q. Do you identify the tasks that</p> <p>6 you are performing in your time entries?</p> <p>7 A. Yes.</p> <p>8 Q. Do you know how many hours you</p> <p>9 spent working on drafting your report?</p> <p>10 A. Yes.</p> <p>11 Q. How many hours?</p> <p>12 A. I don't recall the specific</p> <p>13 number. I can provide an estimate.</p> <p>14 Q. Ballpark? Estimates are your</p> <p>15 trade.</p> <p>16 A. Approximately 25.</p> <p>17 MR. LEVINE: Let's go ahead and</p> <p>18 mark another exhibit to take a look</p> <p>19 at. Cole Exhibit 2.</p> <p>20 (Cole Exhibit 2, Preliminary</p> <p>21 Expert Report of Steven P.</p> <p>22 Cole, Ph.D., marked for</p> <p>23 identification, as of this date.)</p> <p>24 Q. You have before you a document</p> <p>25 that we have marked as Cole Exhibit 2.</p>

<p style="text-align: right;">Page 30</p> <p>1 Cole</p> <p>2 Please take a moment to take a look at it</p> <p>3 and familiarize yourself with the document.</p> <p>4 There appears to be highlights in this</p> <p>5 document?</p> <p>6 MR. LEVINE: Would anybody</p> <p>7 object that we continue the deposition</p> <p>8 working with this one, but we will go</p> <p>9 and print some clean ones to use as</p> <p>10 the exhibit and we could sub them in?</p> <p>11 MR. GROSSMAN: That's fine.</p> <p>12 MR. LEVINE: Could you go print</p> <p>13 me some clean copies of this exhibit?</p> <p>14 Q. We are still on the record.</p> <p>15 Let's work with this exhibit.</p> <p>16 Do you recognize the document</p> <p>17 that we've marked as Cole Exhibit 2?</p> <p>18 A. Understanding that the</p> <p>19 underlinings, the highlighting is not mine,</p> <p>20 yes.</p> <p>21 Q. Is this document the -- this is</p> <p>22 the Preliminary Expert Report of Steven P.</p> <p>23 Cole, Ph.D., correct?</p> <p>24 A. Correct.</p> <p>25 Q. Did you prepare this report?</p>	<p style="text-align: right;">Page 32</p> <p>1 Cole</p> <p>2 case?</p> <p>3 A. I'm not sure if I'm going to be</p> <p>4 asked to do anything further. Given the --</p> <p>5 if I'm asked to do other work, other</p> <p>6 analyses, they might reflect on these</p> <p>7 results.</p> <p>8 Q. Is there anything else that you</p> <p>9 would want to do with this report -- let me</p> <p>10 see if I can rephrase that.</p> <p>11 Is there any additional data</p> <p>12 that you think you would need to make this a</p> <p>13 final report?</p> <p>14 A. Not at this time.</p> <p>15 Q. Is there any other analytical</p> <p>16 technique that you would want to do to make</p> <p>17 this a final report?</p> <p>18 A. Not at this time.</p> <p>19 Q. Was there any data that you</p> <p>20 asked for that were not provided?</p> <p>21 A. I don't think so.</p> <p>22 Q. What data were you provided --</p> <p>23 well, yes.</p> <p>24 What data were you provided to</p> <p>25 analyze for this report?</p>
<p style="text-align: right;">Page 31</p> <p>1 Cole</p> <p>2 A. I did.</p> <p>3 Q. Did you draft the report</p> <p>4 yourself?</p> <p>5 A. I did.</p> <p>6 Q. Did anybody else work with you</p> <p>7 on this report?</p> <p>8 A. Yes.</p> <p>9 Q. Who else?</p> <p>10 A. Counsel.</p> <p>11 Q. Anybody else besides counsel?</p> <p>12 A. No.</p> <p>13 Q. No research assistants?</p> <p>14 A. No.</p> <p>15 Q. The report is titled</p> <p>16 "Preliminary Expert Report." What does it</p> <p>17 mean to be a preliminary expert?</p> <p>18 A. Keeping open the possibility</p> <p>19 that there might be a subsequent report.</p> <p>20 Q. Does the title "Preliminary</p> <p>21 Expert Report" indicate that your opinions</p> <p>22 reflected in the report are incomplete?</p> <p>23 A. No.</p> <p>24 Q. So are these your final opinions</p> <p>25 on the questions you were asked in this</p>	<p style="text-align: right;">Page 33</p> <p>1 Cole</p> <p>2 A. The data that I was provided --</p> <p>3 MR. GROSSMAN: Objection.</p> <p>4 Q. I will rephrase it.</p> <p>5 Were you provided data to</p> <p>6 analyze to form your opinions in this</p> <p>7 report?</p> <p>8 A. Yes.</p> <p>9 Q. Who provided you data?</p> <p>10 A. I received data from the school</p> <p>11 district's website, from counsel, from</p> <p>12 plaintiffs' expert, Bill Cooper, and from</p> <p>13 Steve White.</p> <p>14 Q. Who is Steve White?</p> <p>15 A. Steve White is a former</p> <p>16 candidate for the school board in East</p> <p>17 Ramapo.</p> <p>18 Q. How do you know Steve White?</p> <p>19 A. Through counsel.</p> <p>20 Q. What data did Steve White</p> <p>21 provide you?</p> <p>22 A. Voter registration data.</p> <p>23 Q. Where did Steve White get voter</p> <p>24 registration data from?</p> <p>25 A. I'm not sure.</p>

<p style="text-align: right;">Page 34</p> <p>1 Cole</p> <p>2 Q. How do you know the data he</p> <p>3 provided you is accurate?</p> <p>4 A. There were multiple sources of</p> <p>5 the data and I compared them.</p> <p>6 Q. What do you mean by that?</p> <p>7 A. I mean the voter totals from the</p> <p>8 voter registration data, there were</p> <p>9 consistent results across data.</p> <p>10 Q. When you say that Steve White</p> <p>11 provided you voter registration data, what</p> <p>12 do you mean by "voter registration data"?</p> <p>13 A. These are lists of voters in</p> <p>14 Rockland County.</p> <p>15 Q. Lists of the names of voters?</p> <p>16 A. Voters of -- names, addresses --</p> <p>17 names and addresses.</p> <p>18 Q. What do you use that data for?</p> <p>19 A. Those data were used to</p> <p>20 establish what election districts are</p> <p>21 comprised in the different polling places in</p> <p>22 the school district.</p> <p>23 Q. How?</p> <p>24 A. What do you mean, how?</p> <p>25 Q. How do you use that data to</p>	<p style="text-align: right;">Page 36</p> <p>1 Cole</p> <p>2 Q. Picking back up, did you do</p> <p>3 anything to independently verify the data</p> <p>4 provided to you by Steve White?</p> <p>5 A. Yes.</p> <p>6 Q. What did you do?</p> <p>7 A. I aggregated the data by</p> <p>8 election district and polling place.</p> <p>9 Q. How does that verify the data?</p> <p>10 A. We're using the addresses in the</p> <p>11 data in the election districts to see if</p> <p>12 they match up to the polling places, and so</p> <p>13 what I did was to aggregate the data by</p> <p>14 election district and polling place to see</p> <p>15 if they match up.</p> <p>16 Q. Is it fair to say that you</p> <p>17 didn't rely on any data you received from</p> <p>18 Steve White unless you independently</p> <p>19 verified it?</p> <p>20 MR. GROSSMAN: Objection.</p> <p>21 Q. Do you understand? I can</p> <p>22 rephrase.</p> <p>23 A. Could you rephrase?</p> <p>24 Q. Sure.</p> <p>25 Did you independently verify all</p>
<p style="text-align: right;">Page 35</p> <p>1 Cole</p> <p>2 perform that analysis?</p> <p>3 A. To do my analyses I need to know</p> <p>4 the racial makeup of the different polling</p> <p>5 places. The polling places, their</p> <p>6 boundaries are unique. They're not</p> <p>7 coterminous with other political boundaries.</p> <p>8 Q. How do you use the data that</p> <p>9 Steve White provided you to determine the</p> <p>10 racial makeup of polling places?</p> <p>11 (Record read.)</p> <p>12 A. Okay, so the registration data</p> <p>13 with names, addresses and election</p> <p>14 districts, they were provided to Demographer</p> <p>15 Bill Cooper.</p> <p>16 Q. What did Bill Cooper do with</p> <p>17 them?</p> <p>18 A. Using mapping technology, he was</p> <p>19 able to -- with the street addresses and</p> <p>20 election district designations, he was able</p> <p>21 to estimate the racial makeup of the ten</p> <p>22 polling places in the school district.</p> <p>23 MR. LEVINE: Let's take a quick</p> <p>24 timeout to replace the exhibit.</p> <p>25 (Recess taken.)</p>	<p style="text-align: right;">Page 37</p> <p>1 Cole</p> <p>2 of the data that you received from Steve</p> <p>3 White?</p> <p>4 A. I don't know what you mean by</p> <p>5 "verify all of the data."</p> <p>6 Q. The aggregation that you just</p> <p>7 described in answer to my previous</p> <p>8 question --</p> <p>9 A. Yes.</p> <p>10 Q. -- did you do that for all of</p> <p>11 the data that Steve White provided to you?</p> <p>12 A. Yes.</p> <p>13 Q. In your opinion, did that verify</p> <p>14 the accuracy of the data?</p> <p>15 A. It did.</p> <p>16 Q. Did you have any other</p> <p>17 communications with Steve White?</p> <p>18 MR. GROSSMAN: Objection. To</p> <p>19 the extent it reveals communications</p> <p>20 with counsel, don't answer, but to the</p> <p>21 extent it discusses facts and data</p> <p>22 that were provided to you, you can</p> <p>23 answer.</p> <p>24 A. The only communication that I</p> <p>25 had with him surrounded these kinds of data.</p>

Page 38

1 Cole

2 Q. Is Steve White one of the

3 plaintiffs in this case?

4 A. I don't know.

5 Q. Did you have communications with

6 Steve White and plaintiffs' counsel at the

7 same time?

8 A. I did.

9 Q. Did you have communications with

10 Steve White one to one?

11 A. No.

12 Q. About how many times did you

13 have communications with Steve White?

14 A. Approximately half a dozen

15 times.

16 Q. Did Steve White provide you any

17 other information besides the registration

18 data?

19 A. I don't think so.

20 Q. What did Steve White tell you

21 during those communications?

22 MR. GROSSMAN: Objection. To

23 the extent it reveals communications

24 with counsel, don't answer. To the

25 extent it discusses facts and data or

Page 39

1 Cole

2 the assumptions you were provided, you

3 can answer.

4 MR. LEVINE: Are you asserting a

5 privilege over communications with

6 Steve White?

7 MR. GROSSMAN: Yes.

8 MR. LEVINE: Do you represent

9 Steve White?

10 MR. GROSSMAN: Steve White is

11 consultant to plaintiffs. He has been

12 retained.

13 MR. LEVINE: Okay.

14 Q. I'll ask the question again.

15 What else did Steve White tell

16 you during those communications?

17 MR. GROSSMAN: Same objection.

18 A. The communications centered

19 around the election district polling place

20 issue.

21 Q. Anything else?

22 A. Not that I recall.

23 Q. Were you provided election

24 results data to analyze for this report?

25 A. I was.

Page 40

1 Cole

2 Q. Do you know where the election

3 results came from?

4 A. I assume you mean the election

5 results provided by counsel?

6 Q. Yes.

7 A. Yes.

8 Q. What was the source of the

9 election results data?

10 A. I believe they were websites.

11 Q. To the best of your knowledge,

12 were you provided the official election

13 results?

14 A. Yes.

15 Q. For this report you analyzed the

16 election results from school board elections

17 in the East Ramapo Central School District,

18 right?

19 A. I did.

20 Q. How many elections did you

21 analyze?

22 MR. GROSSMAN: Objection.

23 A. What do you mean by "analyze"?

24 Q. In your report that we've marked

25 as Cole Exhibit 2, you have opinions related

Page 41

1 Cole

2 to four years' worth of East Ramapo school

3 board elections, correct?

4 MR. GROSSMAN: Objection.

5 A. It's actually -- it's not four

6 years.

7 Q. You have opinions related to

8 school board elections in 2013, right?

9 A. Yes.

10 Q. 2014, right?

11 A. Yes.

12 Q. 2015?

13 A. Yes.

14 Q. 2016?

15 A. Yes.

16 Q. And 2017?

17 A. Correct.

18 Q. Did you analyze any other years?

19 A. I analyzed the 2012 U.S.

20 presidential contest.

21 Q. Other than that, did you analyze

22 any other school board elections in East

23 Ramapo?

24 A. No.

25 Q. So you didn't analyze the 2012

<p style="text-align: right;">Page 42</p> <p>1 Cole</p> <p>2 East Ramapo school board election?</p> <p>3 A. No.</p> <p>4 Q. You didn't analyze the 2011</p> <p>5 school board election in East Ramapo?</p> <p>6 A. No.</p> <p>7 Q. You didn't analyze the 2010</p> <p>8 school board election in East Ramapo?</p> <p>9 A. No.</p> <p>10 Q. Why not?</p> <p>11 A. I felt that five years of</p> <p>12 elections, school board elections, was</p> <p>13 sufficient.</p> <p>14 Q. The 2014 election, those</p> <p>15 contests were uncontested, correct?</p> <p>16 A. Correct.</p> <p>17 Q. Did you analyze the uncontested</p> <p>18 elections in 2014?</p> <p>19 A. I did not perform racially</p> <p>20 polarized voting analyses on those contests.</p> <p>21 Q. Other than the 2012 presidential</p> <p>22 election, did you analyze election data from</p> <p>23 any other positions other than school board</p> <p>24 elections?</p> <p>25 A. No.</p>	<p style="text-align: right;">Page 44</p> <p>1 Cole</p> <p>2 jurisdictions were just too small.</p> <p>3 Q. Turning back to the East Ramapo</p> <p>4 school board, do you know whether any Black</p> <p>5 candidates were elected to the school board</p> <p>6 before 2013?</p> <p>7 A. Yes.</p> <p>8 Q. Were there?</p> <p>9 A. I'm going to rephrase that. I</p> <p>10 don't remember.</p> <p>11 Q. The question was: Do you know</p> <p>12 whether any Black candidates were elected to</p> <p>13 the board of education prior to 2013?</p> <p>14 A. I don't recall.</p> <p>15 Q. Do you know whether any Latino</p> <p>16 candidates were elected to the board of</p> <p>17 education before 2013?</p> <p>18 A. Again, I'm not sure.</p> <p>19 Q. Did you do anything to</p> <p>20 investigate whether there may have been</p> <p>21 racial polarization in elections in East</p> <p>22 Ramapo prior to 2013?</p> <p>23 A. I have not.</p> <p>24 Q. So it's fair to say that you're</p> <p>25 not opining to anything that occurred in</p>
<p style="text-align: right;">Page 43</p> <p>1 Cole</p> <p>2 Q. So you didn't analyze election</p> <p>3 data from town board elections for towns in</p> <p>4 Rockland County?</p> <p>5 A. I did not analyze them.</p> <p>6 Q. Were you provided data from town</p> <p>7 board elections?</p> <p>8 A. If I'm not mistaken, it's town</p> <p>9 council elections, but, yes, I was provided</p> <p>10 some town data.</p> <p>11 Q. Who provided you that data?</p> <p>12 A. Counsel.</p> <p>13 Q. Did you analyze that data?</p> <p>14 A. I did not.</p> <p>15 Q. Why not?</p> <p>16 A. I felt that those contests only</p> <p>17 included a small segment of the district --</p> <p>18 school district voters.</p> <p>19 Q. Other than the town level data,</p> <p>20 were you provided any other election data?</p> <p>21 A. There may have been some other</p> <p>22 small jurisdiction data. I just don't</p> <p>23 remember specifically what they were, but</p> <p>24 the reason I didn't analyze them -- I just</p> <p>25 don't remember -- was it that their</p>	<p style="text-align: right;">Page 45</p> <p>1 Cole</p> <p>2 East Ramapo prior to the 2013 elections; is</p> <p>3 that right?</p> <p>4 A. Clarify, you're talking about</p> <p>5 school board back to 2013, because there was</p> <p>6 a 2012 --</p> <p>7 Q. Yes.</p> <p>8 A. Okay, so I am opining about --</p> <p>9 how about you rephrasing the question?</p> <p>10 Q. Yes.</p> <p>11 Did you do anything to</p> <p>12 investigate whether there may have been</p> <p>13 racial polarization in East Ramapo school</p> <p>14 board elections prior to 2013?</p> <p>15 A. I did not.</p> <p>16 Q. Specifically in reference to</p> <p>17 your report, take a look at paragraph 1 on</p> <p>18 the first page of the report. At the top of</p> <p>19 the page it says, "Page 2 of 46."</p> <p>20 You formed opinions on three</p> <p>21 questions, right?</p> <p>22 MR. GROSSMAN: Objection.</p> <p>23 A. There were three main questions</p> <p>24 that I focused on.</p> <p>25 Q. Let's talk about those three</p>

<p style="text-align: right;">Page 46</p> <p>1 Cole</p> <p>2 main questions first.</p> <p>3 The first question was whether</p> <p>4 Black voters in the district are politically</p> <p>5 cohesive, correct?</p> <p>6 A. Correct.</p> <p>7 Q. Your opinion on that question is</p> <p>8 that they are politically cohesive, correct?</p> <p>9 A. Correct.</p> <p>10 Q. Is that still your opinion as</p> <p>11 you sit here today?</p> <p>12 A. It is.</p> <p>13 Q. The second question was whether</p> <p>14 Black and Latino voters are cohesive, right?</p> <p>15 A. Yes.</p> <p>16 Q. And you also answered that</p> <p>17 question in the affirmative, correct?</p> <p>18 A. Correct.</p> <p>19 Q. Is that still your opinion as</p> <p>20 you sit here today?</p> <p>21 A. Yes, it is.</p> <p>22 Q. And the third question you were</p> <p>23 asked to opine on is whether candidates</p> <p>24 preferred by Black or a coalition of Black</p> <p>25 and Latino voters in the district are</p>	<p style="text-align: right;">Page 48</p> <p>1 Cole</p> <p>2 A. In terms of the questions I was</p> <p>3 asked to analyze, those were the questions.</p> <p>4 Q. Did you analyze any other</p> <p>5 questions besides those three?</p> <p>6 A. In conducting my research, I</p> <p>7 explored the issue of slating in the school</p> <p>8 district, slating of candidates. I explored</p> <p>9 the racial makeup of the schools.</p> <p>10 Q. Anything else?</p> <p>11 A. Those were the main other areas</p> <p>12 of inquiry.</p> <p>13 Q. What do you mean by "explored"?</p> <p>14 A. Did research on.</p> <p>15 Q. What do you mean by "slating"?</p> <p>16 A. I mean in the school district,</p> <p>17 are there groups of candidates running</p> <p>18 together as a slate.</p> <p>19 Q. Did you form an opinion on the</p> <p>20 issue of the slating of candidates in East</p> <p>21 Ramapo school board elections?</p> <p>22 A. I did.</p> <p>23 Q. What was that opinion?</p> <p>24 A. That slates of candidates were</p> <p>25 supported. There was one slate of</p>
<p style="text-align: right;">Page 47</p> <p>1 Cole</p> <p>2 usually defeated by candidates supported by</p> <p>3 the White majority voting as a bloc,</p> <p>4 correct?</p> <p>5 A. Correct.</p> <p>6 Q. And you also answered that</p> <p>7 question in the affirmative?</p> <p>8 A. Yes.</p> <p>9 Q. Is that still your opinion as</p> <p>10 you sit here today?</p> <p>11 A. It is.</p> <p>12 Q. What other questions were you</p> <p>13 asked to consider?</p> <p>14 MR. GROSSMAN: Objection.</p> <p>15 MR. LEVINE: What is the basis</p> <p>16 for that objection?</p> <p>17 MR. GROSSMAN: It's vague. It's</p> <p>18 unclear, what other questions and in</p> <p>19 what context.</p> <p>20 Q. Your answer to one of my prior</p> <p>21 questions was, to summarize, that those</p> <p>22 three questions I just asked you about were</p> <p>23 primary questions. Did you mean to suggest</p> <p>24 that there were other questions you were</p> <p>25 asked to analyze?</p>	<p style="text-align: right;">Page 49</p> <p>1 Cole</p> <p>2 candidates that were typically supported by</p> <p>3 groups that were supportive of public</p> <p>4 schools, another group of candidates</p> <p>5 typically were supported by interests that</p> <p>6 were supportive of private schools.</p> <p>7 Q. What do you mean "supportive of</p> <p>8 public schools"?</p> <p>9 A. Campaign for, held meetings for,</p> <p>10 wrote letters in newspapers for, those kinds</p> <p>11 of things.</p> <p>12 Q. Maybe I'm not clear. Public</p> <p>13 schools are an institution. What do you</p> <p>14 mean "supportive of public schools"?</p> <p>15 A. Typically the groups who support</p> <p>16 public schools or support a slate of</p> <p>17 candidates, supporters of public schools are</p> <p>18 looking to improve the quality of the public</p> <p>19 schools.</p> <p>20 (Record read.)</p> <p>21 A. Yes.</p> <p>22 Q. In paragraph 6 of your report</p> <p>23 you state that "sources show that minority</p> <p>24 preferred candidates generally run with the</p> <p>25 support of organizations advocating for</p>

<p style="text-align: right;">Page 50</p> <p>1 Cole</p> <p>2 increased investment in the district's</p> <p>3 public schools." Is that what you're</p> <p>4 referring to when you testified about</p> <p>5 organizations supportive of public schools?</p> <p>6 A. That kind of thing, yes.</p> <p>7 Q. What organizations are you</p> <p>8 referring to?</p> <p>9 A. I think some of the groups, one</p> <p>10 was called Power of Ten, one was Support</p> <p>11 East Ramapo.</p> <p>12 Q. What do you know about Power of</p> <p>13 Ten?</p> <p>14 A. I don't know much about them.</p> <p>15 Q. Is it a membership organization?</p> <p>16 A. What do you mean by "a</p> <p>17 membership organization"?</p> <p>18 Q. Is it an organization with</p> <p>19 members?</p> <p>20 A. I believe so.</p> <p>21 Q. Do you know how many members?</p> <p>22 A. I don't.</p> <p>23 Q. Any other organizations?</p> <p>24 A. Those were the two main ones.</p> <p>25 Q. Turning back to paragraph 6, the</p>	<p style="text-align: right;">Page 52</p> <p>1 Cole</p> <p>2 mean by "leaders"?</p> <p>3 A. One example was, in one of the</p> <p>4 contests a letter was published, signed by</p> <p>5 approximately 50 private school</p> <p>6 administrators.</p> <p>7 Q. So are private school</p> <p>8 administrators leaders favoring lower taxes?</p> <p>9 A. I believe they are.</p> <p>10 Q. Anybody else?</p> <p>11 A. That's it for now.</p> <p>12 Q. What do you know about private</p> <p>13 schools in East Ramapo?</p> <p>14 A. That's a pretty broad question.</p> <p>15 Q. Do you know anything about the</p> <p>16 private schools in East Ramapo?</p> <p>17 MR. GROSSMAN: Objection.</p> <p>18 A. Yes.</p> <p>19 Q. What do you know about the</p> <p>20 private schools in East Ramapo?</p> <p>21 MR. GROSSMAN: Objection.</p> <p>22 A. I know there are approximately</p> <p>23 70, seven-zero.</p> <p>24 Q. How do you know that?</p> <p>25 A. I reviewed demographic data from</p>
<p style="text-align: right;">Page 51</p> <p>1 Cole</p> <p>2 remainder of the sentence that we are</p> <p>3 looking at says, "and White preferred</p> <p>4 candidates generally run with the support of</p> <p>5 organizations and leaders favoring lower</p> <p>6 taxes while maintaining support for private</p> <p>7 schools." Is that what you were referring</p> <p>8 to when you testified earlier when you used</p> <p>9 the phrase "supportive of private schools"?</p> <p>10 A. Yes.</p> <p>11 Q. What organizations are you</p> <p>12 referring to there?</p> <p>13 A. One organization is called</p> <p>14 SERTA, S-E-R-T-A.</p> <p>15 Q. What do you know about SERTA?</p> <p>16 A. I believe their premise is to</p> <p>17 try to keep taxes low in the district.</p> <p>18 Q. Is that an organization with</p> <p>19 members?</p> <p>20 A. I believe so.</p> <p>21 Q. Do you know how many members it</p> <p>22 has?</p> <p>23 A. I don't.</p> <p>24 Q. You used the phrase</p> <p>25 "organizations" and "leaders." What do you</p>	<p style="text-align: right;">Page 53</p> <p>1 Cole</p> <p>2 the New York State Education Department.</p> <p>3 Q. Do you recall what data</p> <p>4 specifically you reviewed?</p> <p>5 A. Data on their website about</p> <p>6 school enrollment by race.</p> <p>7 Q. Do you know whether any of the</p> <p>8 private schools in East Ramapo are religious</p> <p>9 schools?</p> <p>10 A. Yes.</p> <p>11 Q. About how many of them are</p> <p>12 religious schools?</p> <p>13 A. From viewing the website, I saw</p> <p>14 that most of them are religious schools.</p> <p>15 Q. What religion?</p> <p>16 A. Most of them were related to the</p> <p>17 Jewish religion.</p> <p>18 Q. Have you heard the term</p> <p>19 "yeshiva" before?</p> <p>20 A. Yes.</p> <p>21 Q. Do you know whether most of</p> <p>22 these private schools in East Ramapo are</p> <p>23 yeshivas?</p> <p>24 A. Many of the names were yeshivas,</p> <p>25 yes.</p>

<p style="text-align: right;">Page 54</p> <p>1 Cole</p> <p>2 Q. What is a yeshiva in your</p> <p>3 understanding?</p> <p>4 A. A yeshiva is a school devoted to</p> <p>5 educating Jewish teachings, Hebrew.</p> <p>6 Q. Moving one paragraph up in your</p> <p>7 report stating your conclusion, the final</p> <p>8 sentence of paragraph 5 you state, "The most</p> <p>9 recent six contested elections exhibit an</p> <p>10 extreme degree of racial polarization that I</p> <p>11 have rarely seen in over 25 years of</p> <p>12 analyzing voting behavior."</p> <p>13 My first question is: When you</p> <p>14 say "the most recent six contested</p> <p>15 elections," are you referring to the school</p> <p>16 board elections in 2017 and 2016?</p> <p>17 A. Yes.</p> <p>18 Q. What do you mean by "an extreme</p> <p>19 degree of racial polarization"?</p> <p>20 A. "Racially polarized voting"</p> <p>21 basically defined is when races vote</p> <p>22 differently. You could have in a contest</p> <p>23 where we're looking at, let's say, Whites</p> <p>24 and Blacks, you might have a situation where</p> <p>25 55 percent of the Whites vote for one</p>	<p style="text-align: right;">Page 56</p> <p>1 Cole</p> <p>2 much support a particular racial group gives</p> <p>3 for a candidate. Cohesion is a continuum,</p> <p>4 is a contest where a particular racial group</p> <p>5 gives 51 percent of their support for a</p> <p>6 candidate. That's a rather weak example of</p> <p>7 cohesion. We move up to 60 percent, if it's</p> <p>8 a 60/40 split in political circles, that</p> <p>9 might be considered a rather strong split.</p> <p>10 70/30 is even greater.</p> <p>11 Q. So I understand your testimony,</p> <p>12 so what you just described relates to</p> <p>13 cohesion. Separating that from racial</p> <p>14 polarization, an election is racially</p> <p>15 polarized when 51 percent of White voters</p> <p>16 vote for one candidate and 51 percent of</p> <p>17 Black voters vote for another candidate; is</p> <p>18 that right?</p> <p>19 A. That's right.</p> <p>20 MR. GROSSMAN: Is this a good</p> <p>21 stopping point? We've gone about 90</p> <p>22 minutes.</p> <p>23 Q. Do you want to take a break?</p> <p>24 A. Sure.</p> <p>25 MR. LEVINE: Let's take a break.</p>
<p style="text-align: right;">Page 55</p> <p>1 Cole</p> <p>2 candidate and 55 percent, in this example,</p> <p>3 of the Blacks vote for the other candidates.</p> <p>4 I'd consider that polarized.</p> <p>5 Q. Just following from your</p> <p>6 example, which is very helpful, would you</p> <p>7 conclude that there is racially polarized</p> <p>8 voting if there was 51 percent White voters</p> <p>9 voting for one candidate and 49 percent of</p> <p>10 White voters voting for another candidate</p> <p>11 and 49 percent of Black voters voting for</p> <p>12 candidate A and 51 percent of Black voters</p> <p>13 voting for candidate B? I could probably do</p> <p>14 that better.</p> <p>15 The same split that you just</p> <p>16 described, but take it down four more</p> <p>17 points, so it's 51 percent and 49 percent;</p> <p>18 would that do the trick?</p> <p>19 A. That would be a relatively weak</p> <p>20 example of racially polarized voting, and</p> <p>21 usually we just look at just more than one</p> <p>22 contest, but we're just using this as an</p> <p>23 example.</p> <p>24 What we're looking at really --</p> <p>25 what we're looking at here is cohesion, how</p>	<p style="text-align: right;">Page 57</p> <p>1 Cole</p> <p>2 (Recess taken.)</p> <p>3 MR. LEVINE: Could you read back</p> <p>4 the last question and answer to pick</p> <p>5 up where we were?</p> <p>6 (Record read.)</p> <p>7 Q. Back on the record after the</p> <p>8 break.</p> <p>9 Would an election not be</p> <p>10 racially polarized if a majority of the</p> <p>11 Black voters and a majority of White voters</p> <p>12 vote for the same candidate?</p> <p>13 A. That particular contest, that</p> <p>14 particular example would be an example where</p> <p>15 it was not polarized.</p> <p>16 Q. Does it matter if 80 percent of</p> <p>17 White voters vote for a candidate and 51</p> <p>18 percent of Black voters vote for the same</p> <p>19 candidate or is that not racially polarized?</p> <p>20 MR. GROSSMAN: Objection.</p> <p>21 A. Could you rephrase that?</p> <p>22 Q. All right.</p> <p>23 Playing with the same example --</p> <p>24 A. Yes.</p> <p>25 Q. -- does it matter if the degrees</p>

<p style="text-align: right;">Page 58</p> <p>1 Cole</p> <p>2 of support are different such that, for an</p> <p>3 example, if 80 percent of White voters and</p> <p>4 51 percent of Black voters support the same</p> <p>5 candidate, would that election not be</p> <p>6 racially polarized?</p> <p>7 A. The example you gave me, the</p> <p>8 majority of the both racial groups are</p> <p>9 supporting the same candidate, one is at 80</p> <p>10 percent and one is at 51 percent. In</p> <p>11 general, I would say that particular example</p> <p>12 is not supportive of racially polarized</p> <p>13 voting.</p> <p>14 Q. Is that the only scenario in</p> <p>15 which you would not find racially polarized</p> <p>16 voting, meaning where majorities of Black</p> <p>17 voters and majorities of White voters both</p> <p>18 support the same candidate?</p> <p>19 A. I just want to be clear about</p> <p>20 this. We're talking about an election, a</p> <p>21 contest, as an example. That's one</p> <p>22 scenario. If you are talking about multiple</p> <p>23 pieces of information, multiple assessments</p> <p>24 of racially polarized voting, a richer set</p> <p>25 of results, then we've got a different kind</p>	<p style="text-align: right;">Page 60</p> <p>1 Cole</p> <p>2 only way an election cannot be racially</p> <p>3 polarized is one where a majority of White</p> <p>4 voters and a majority of Black voters vote</p> <p>5 for the same candidate?</p> <p>6 A. A simplistic way of looking at</p> <p>7 it, given your example, both racial groups</p> <p>8 are supporting the same candidate in your</p> <p>9 example, right?</p> <p>10 Q. Yes.</p> <p>11 A. That is a situation -- that's a</p> <p>12 situation which would not be racially</p> <p>13 polarized.</p> <p>14 And so the second part of your</p> <p>15 question, I just don't understand.</p> <p>16 Q. Does it matter why voters vote</p> <p>17 the way they do?</p> <p>18 A. I'm not -- my job is not to give</p> <p>19 reasons or explain why. It's just I'm</p> <p>20 looking at results.</p> <p>21 Q. So your working definition of</p> <p>22 racial polarization does not consider the</p> <p>23 reasons why voters vote the way they vote?</p> <p>24 A. If I'm aware of a context that</p> <p>25 might provide the Court with background as</p>
<p style="text-align: right;">Page 59</p> <p>1 Cole</p> <p>2 of question.</p> <p>3 But if you're giving me one</p> <p>4 example to discuss at this moment, let's</p> <p>5 keep it to that as an example of.</p> <p>6 So would you repeat your</p> <p>7 question then?</p> <p>8 Q. Yes.</p> <p>9 One hypothetical election, one</p> <p>10 contest, a majority of White voters and a</p> <p>11 majority of Black voters vote for the same</p> <p>12 candidate, that is not racially polarized</p> <p>13 voting, is that the only scenario in which</p> <p>14 there will not be racially polarized voting?</p> <p>15 A. I don't know what you mean by</p> <p>16 that.</p> <p>17 Q. Well, I'm asking for your</p> <p>18 working definition of "racially polarized</p> <p>19 voting" so that I can understand what you</p> <p>20 would need to see to conclude that an</p> <p>21 election was not racially polarized.</p> <p>22 So if a racially polarized</p> <p>23 election is one where a majority of White</p> <p>24 voters and a majority of Black voters vote</p> <p>25 for different candidates, does that mean the</p>	<p style="text-align: right;">Page 61</p> <p>1 Cole</p> <p>2 to why the results are what they are, I</p> <p>3 might report it, but it's not my job to</p> <p>4 figure out the reasons why.</p> <p>5 Q. In a single election, for</p> <p>6 example, does the context change your</p> <p>7 analysis of whether there is racially</p> <p>8 polarized voting?</p> <p>9 A. Given that there is ample data</p> <p>10 and all the quantitative aspects are</p> <p>11 appropriate, I would be -- the contextual</p> <p>12 information would not change the way I do</p> <p>13 the analysis.</p> <p>14 Q. Let's take a look at a specific</p> <p>15 example. Turn in your report to the</p> <p>16 document marked Cole Exhibit 2 to where on</p> <p>17 the bottom of the page it says "Page 40."</p> <p>18 At the top of the page is says "Table 2</p> <p>19 (cont.), Member Elections 2013-2017, Summary</p> <p>20 of EI and HPA Racial Bloc Voting Analysis."</p> <p>21 When you say "EI," that refers</p> <p>22 to ecological inference, correct?</p> <p>23 A. Correct.</p> <p>24 Q. This reporter or this table in</p> <p>25 the report summarizes the analysis that you</p>

<p style="text-align: right;">Page 62</p> <p>1 Cole</p> <p>2 performed using the ecological inference</p> <p>3 technique, correct?</p> <p>4 A. Correct. That's one of the</p> <p>5 analyses reported in this table.</p> <p>6 Q. In the middle of the page</p> <p>7 beneath May 21, 2013, do you see that table?</p> <p>8 A. I do.</p> <p>9 Q. The first column has a title</p> <p>10 that says "Percent Latino Voters Voting for</p> <p>11 Candidate, EI." Does that mean that this</p> <p>12 column reports your estimates using the</p> <p>13 ecological inference technique?</p> <p>14 A. Yes.</p> <p>15 Q. Moving over one column where the</p> <p>16 column is entitled "Percent NH Black Voters</p> <p>17 Voting for Candidate, EI," does that column</p> <p>18 report the results of your ecological</p> <p>19 inference analysis for non-Hispanic Black</p> <p>20 voters; is that what that means?</p> <p>21 A. Yes.</p> <p>22 Q. And the next column over,</p> <p>23 "Percent NH White Voting for White Voters</p> <p>24 Voting for Candidate" and it says "EI," does</p> <p>25 that column report the results of your</p>	<p style="text-align: right;">Page 64</p> <p>1 Cole</p> <p>2 non-Hispanic Black voters voting for</p> <p>3 candidate, EI" for the "Seat of Moses</p> <p>4 Friedman" in 2013, do you see where I'm</p> <p>5 looking?</p> <p>6 A. I do.</p> <p>7 Q. You're reporting that 73.9</p> <p>8 percent of non-Hispanic Black voters voted</p> <p>9 for a candidate named MaraLuz Corado; is</p> <p>10 that correct?</p> <p>11 A. Correct.</p> <p>12 Q. You're reporting your conclusion</p> <p>13 that 29.3 percent of non-Hispanic Black</p> <p>14 voters voted for a candidate named Margaret</p> <p>15 Tuck, correct?</p> <p>16 MR. GROSSMAN: Objection.</p> <p>17 A. You're going to have to repeat</p> <p>18 that.</p> <p>19 Q. In this column are you reporting</p> <p>20 your conclusion that 29.3 percent of</p> <p>21 non-Hispanic Black voters voted for</p> <p>22 candidate Margaret Tuck?</p> <p>23 MR. GROSSMAN: Objection.</p> <p>24 A. 29.3 is an estimate from the</p> <p>25 ecological inference program of what percent</p>
<p style="text-align: right;">Page 63</p> <p>1 Cole</p> <p>2 ecological inference analysis for the</p> <p>3 percentage of non-Hispanic White voters</p> <p>4 voting for a candidate in 2013?</p> <p>5 A. Yes.</p> <p>6 Q. The next column over is</p> <p>7 different. It says, "Percentage NH White</p> <p>8 Voters Voting for Candidate, HPA." What</p> <p>9 does "HPA" stand for?</p> <p>10 A. That stands for homogenous</p> <p>11 precinct analysis.</p> <p>12 Q. Does that column report the</p> <p>13 result of your analysis using the homogenous</p> <p>14 precinct analysis for the percentage of</p> <p>15 non-Hispanic White voters voting for a</p> <p>16 particular candidate in 2013?</p> <p>17 A. Yes.</p> <p>18 Q. The final column says "Votes."</p> <p>19 What is that reporting?</p> <p>20 A. Those are the vote totals that</p> <p>21 each candidate received in the contest.</p> <p>22 Q. Do the numbers in the "Votes"</p> <p>23 column come from the official vote tallies?</p> <p>24 A. Yes.</p> <p>25 Q. Looking at "Percentage</p>	<p style="text-align: right;">Page 65</p> <p>1 Cole</p> <p>2 of non-Hispanic Black voters voted for</p> <p>3 Margaret Tuck.</p> <p>4 Q. How did you generate that</p> <p>5 estimate?</p> <p>6 A. These estimates are generated</p> <p>7 with Gary King's program Ecological</p> <p>8 Inference.</p> <p>9 Q. Are you an expert in Professor</p> <p>10 King's Ecological Inference technique?</p> <p>11 A. What do you mean by "expert"?</p> <p>12 Q. Well, that's an interesting</p> <p>13 question, I suppose. Why don't we take a</p> <p>14 few steps back before we get back to that</p> <p>15 question.</p> <p>16 What is Professor King's</p> <p>17 ecological inference technique?</p> <p>18 A. The methodology was developed in</p> <p>19 the late 1990s. It combines several</p> <p>20 statistical techniques; the method of bounds</p> <p>21 and a maximum likelihood, statistical</p> <p>22 methodology to provide -- can be used to</p> <p>23 generate estimates of racially polarized</p> <p>24 voting.</p> <p>25 Q. Do you hold yourself out to be</p>

<p style="text-align: right;">Page 66</p> <p>1 Cole</p> <p>2 an expert in using Professor King's</p> <p>3 Ecological Inference technique?</p> <p>4 A. Again, in this context what do</p> <p>5 you mean by "expert"?</p> <p>6 Q. I guess the relevant question</p> <p>7 is: What do you mean by expert because this</p> <p>8 is an expert report?</p> <p>9 Do you consider yourself to be</p> <p>10 an expert in the use of Professor King's</p> <p>11 Ecological Inference technique?</p> <p>12 A. I'm an expert in the use of the</p> <p>13 technique.</p> <p>14 Q. How many times have you</p> <p>15 performed an ecological inference analysis?</p> <p>16 A. That's an awfully broad</p> <p>17 question. Are you asking how many times I</p> <p>18 ran it for this case?</p> <p>19 Q. No.</p> <p>20 How about we phrase it this way:</p> <p>21 In how many cases have you performed an</p> <p>22 ecological inference analysis?</p> <p>23 A. Again, are you referring to</p> <p>24 cases that have actually been filed?</p> <p>25 Q. Yes.</p>	<p style="text-align: right;">Page 68</p> <p>1 Cole</p> <p>2 A. I don't recall.</p> <p>3 Q. Is EzI open-source software?</p> <p>4 A. I believe so.</p> <p>5 Q. Have you downloaded Mods for the</p> <p>6 software, M-O-D-S, modifications?</p> <p>7 A. I don't believe so.</p> <p>8 Q. Do you know who produces the</p> <p>9 software?</p> <p>10 A. I know who authored the</p> <p>11 software.</p> <p>12 Q. Who authored the software?</p> <p>13 A. Gary King.</p> <p>14 Q. Did you license it from Gary</p> <p>15 King?</p> <p>16 A. No.</p> <p>17 Q. When did you obtain the program</p> <p>18 from -- well, when did you obtain the</p> <p>19 program?</p> <p>20 A. The program that I used for</p> <p>21 these analyses, I believe I obtained it</p> <p>22 about five years ago.</p> <p>23 Q. Have you updated that software</p> <p>24 since then?</p> <p>25 A. I have not.</p>
<p style="text-align: right;">Page 67</p> <p>1 Cole</p> <p>2 A. Approximately a dozen.</p> <p>3 Q. Do you use a software program to</p> <p>4 perform the King's Ecological Inference</p> <p>5 technique?</p> <p>6 A. I do.</p> <p>7 Q. Does the software program have a</p> <p>8 name?</p> <p>9 A. Yes.</p> <p>10 Q. What is it called?</p> <p>11 A. EzI.</p> <p>12 Q. Do you know what "EzI" stands</p> <p>13 for?</p> <p>14 MR. GROSSMAN: I think it's the</p> <p>15 word "easy" followed by the letter I;</p> <p>16 is that correct?</p> <p>17 THE WITNESS: No.</p> <p>18 MR. GROSSMAN: It's EzI.</p> <p>19 (Record read.)</p> <p>20 A. I actually don't.</p> <p>21 Q. What operating system do you use</p> <p>22 to run EzI?</p> <p>23 A. It is a DOS-based system.</p> <p>24 Q. Do you know what version of the</p> <p>25 software you have?</p>	<p style="text-align: right;">Page 69</p> <p>1 Cole</p> <p>2 Q. What information do you need to</p> <p>3 input into the software to generate an EI</p> <p>4 estimate?</p> <p>5 A. You need total votes cast, you</p> <p>6 need proportion of the votes cast for a</p> <p>7 particular candidate, you need proportion of</p> <p>8 the racial percentage and you need turnout.</p> <p>9 Q. Did you have all of that</p> <p>10 information when you ran these EI estimates?</p> <p>11 A. Yes.</p> <p>12 Q. What information did you input</p> <p>13 for turnout?</p> <p>14 A. Total number of votes as a</p> <p>15 function of total CVAP.</p> <p>16 Q. What do you mean "as a function</p> <p>17 of"?</p> <p>18 A. Related to the voting age</p> <p>19 population.</p> <p>20 Q. By "CVAP" you mean citizen</p> <p>21 voting age population?</p> <p>22 A. That's right.</p> <p>23 Q. Do you mean to say that turnout</p> <p>24 is the number of votes cast as subtracted</p> <p>25 from the total of CVAP?</p>

<p style="text-align: right;">Page 70</p> <p>1 Cole</p> <p>2 A. Divided by.</p> <p>3 Q. Divided by, okay.</p> <p>4 Does that tell you information</p> <p>5 about the turnout by racial category?</p> <p>6 A. What do you mean "does that tell</p> <p>7 you"?</p> <p>8 Q. Does that data tell you any</p> <p>9 information about the turnout by racial</p> <p>10 category?</p> <p>11 A. Those data by itself do not.</p> <p>12 Q. Are you able to estimate turnout</p> <p>13 by racial category?</p> <p>14 A. Yes.</p> <p>15 Q. How do you do that?</p> <p>16 A. That's part of what the</p> <p>17 ecological inference program can do.</p> <p>18 Q. Did you generate estimates of</p> <p>19 the turnout by racial category for the 2013</p> <p>20 races?</p> <p>21 A. That's part of the output.</p> <p>22 Q. Did you report that in your</p> <p>23 report?</p> <p>24 A. I did not.</p> <p>25 Q. Why not?</p>	<p style="text-align: right;">Page 72</p> <p>1 Cole</p> <p>2 to perform the ecological inference</p> <p>3 analysis, correct?</p> <p>4 A. Correct.</p> <p>5 Q. In paragraph 26 of your report</p> <p>6 you say that one of the advantages of</p> <p>7 ecological inference is that "measures of</p> <p>8 the statistical accuracy of the estimates</p> <p>9 can be generated." Do you see that?</p> <p>10 A. What paragraph are you reading</p> <p>11 from?</p> <p>12 Q. 26.</p> <p>13 A. It's page 26. What paragraph?</p> <p>14 Q. Sorry.</p> <p>15 A. Or are you talking about</p> <p>16 paragraph 26?</p> <p>17 Q. I'm talking about paragraph 26.</p> <p>18 A. I'm sorry.</p> <p>19 Q. Page 11, paragraph 26, the</p> <p>20 second to last sentence of the paragraph, I</p> <p>21 can read it, it says, "Additional advantages</p> <p>22 of EI are that estimates of RBV can be</p> <p>23 generated for each precinct or polling place</p> <p>24 and that measures of the statistical</p> <p>25 accuracy of the estimates can be generated."</p>
<p style="text-align: right;">Page 71</p> <p>1 Cole</p> <p>2 A. That's not a main focus of my</p> <p>3 inquiry.</p> <p>4 Q. Do you have that information?</p> <p>5 A. I captured that information,</p> <p>6 yes.</p> <p>7 Q. How did you capture it?</p> <p>8 A. It's saved in a file.</p> <p>9 Q. On your computer?</p> <p>10 A. Yes.</p> <p>11 Q. Was there any other data that</p> <p>12 you required, but were not provided to</p> <p>13 perform the ecological inference analysis</p> <p>14 for 2013?</p> <p>15 MR. GROSSMAN: Objection.</p> <p>16 A. Could you repeat that?</p> <p>17 Q. Yes.</p> <p>18 Was there any data that you</p> <p>19 needed that you weren't provided to perform</p> <p>20 the ecological inference analysis for 2013?</p> <p>21 A. I don't know quite how to answer</p> <p>22 the question the way you phrased it. Some</p> <p>23 of the data that I used, I wasn't provided.</p> <p>24 I obtain on my own.</p> <p>25 Q. You had all the data you needed</p>	<p style="text-align: right;">Page 73</p> <p>1 Cole</p> <p>2 Are you with me?</p> <p>3 A. I am.</p> <p>4 Q. What do you mean by "measures of</p> <p>5 the statistical accuracy of the estimates"?</p> <p>6 A. What Gary King's EI program can</p> <p>7 do is generate a measure called -- it's an</p> <p>8 error term, it's a standard error, that is</p> <p>9 an index of the statistical accuracy of the</p> <p>10 estimate.</p> <p>11 Q. Did you measure the statistical</p> <p>12 accuracy of the estimates for the 2013</p> <p>13 races?</p> <p>14 A. Yes. They're part of the</p> <p>15 output.</p> <p>16 Q. Did you report the measures of</p> <p>17 the statistical accuracy of the estimates in</p> <p>18 2013?</p> <p>19 A. They're not reported here.</p> <p>20 Q. Why not?</p> <p>21 A. It's not a requirement of the</p> <p>22 report like this to report the standard</p> <p>23 errors.</p> <p>24 Q. Do you know what the standard</p> <p>25 errors for the estimates for the 2013 races</p>

<p style="text-align: right;">Page 74</p> <p>1 Cole</p> <p>2 are?</p> <p>3 A. I can report to you a range of</p> <p>4 the errors. I don't know the specific ones</p> <p>5 per estimate off the top of my head.</p> <p>6 Q. All right.</p> <p>7 Do you have a document that does</p> <p>8 set out the standard errors for the</p> <p>9 estimates for the 2013 election?</p> <p>10 A. It's part of the output.</p> <p>11 Q. So you have that retained in a</p> <p>12 file someplace?</p> <p>13 A. I do.</p> <p>14 Q. What would be the range of the</p> <p>15 standard errors that you referred to for May</p> <p>16 21, 2013 elections?</p> <p>17 A. If I recall correctly, I believe</p> <p>18 they were less than one up to maybe</p> <p>19 approximately five, but that's -- that's my</p> <p>20 recollection.</p> <p>21 Q. Would that recollection of the</p> <p>22 range of standard errors apply to all races</p> <p>23 that you analyzed for 2013?</p> <p>24 A. I think that's the range for the</p> <p>25 18 estimates. Again, that's just an</p>	<p style="text-align: right;">Page 76</p> <p>1 Cole</p> <p>2 A. A confidence interval is a bound</p> <p>3 that is put on your point estimate that</p> <p>4 gives you a level of confidence in your</p> <p>5 result.</p> <p>6 Q. How is a confidence interval</p> <p>7 determined?</p> <p>8 A. Confidence interval is</p> <p>9 determined by using some measure of error.</p> <p>10 You use that to create a bound to the point</p> <p>11 estimate.</p> <p>12 Q. Do you use the standard error</p> <p>13 that you testified about earlier to generate</p> <p>14 confidence intervals?</p> <p>15 A. You could.</p> <p>16 Q. Could you do something else?</p> <p>17 A. There are other measures of</p> <p>18 error that you could use.</p> <p>19 Q. Did you calculate confidence</p> <p>20 intervals for your estimates for the 2013</p> <p>21 races?</p> <p>22 A. I did not.</p> <p>23 Q. And you don't report any</p> <p>24 confidence intervals for any of the</p> <p>25 estimates in your report, right?</p>
<p style="text-align: right;">Page 75</p> <p>1 Cole</p> <p>2 estimate of the range. I don't recall the</p> <p>3 exact numbers.</p> <p>4 Q. Are you familiar with the phrase</p> <p>5 "point estimate"; if I say that, do you know</p> <p>6 what that means?</p> <p>7 A. I do.</p> <p>8 Q. What is a point estimate?</p> <p>9 A. A point estimate is an estimate</p> <p>10 generated by typically a sample from a</p> <p>11 larger set of data. It's an estimate of</p> <p>12 what the true value of the measure of</p> <p>13 interest is.</p> <p>14 Q. So for the 2013 election where</p> <p>15 you report 73.9 percent of non-Hispanic</p> <p>16 Black voters voting for candidate MarLuz</p> <p>17 Corado, is 73.9 a point estimate?</p> <p>18 A. It is.</p> <p>19 Q. Are all of the figures in these</p> <p>20 columns point estimates?</p> <p>21 A. In the EI columns, yes.</p> <p>22 Q. Are you familiar with the</p> <p>23 concept of a confidence interval?</p> <p>24 A. I am.</p> <p>25 Q. What is a confidence interval?</p>	<p style="text-align: right;">Page 77</p> <p>1 Cole</p> <p>2 A. That's correct.</p> <p>3 Q. Why did you not calculate</p> <p>4 confidence intervals?</p> <p>5 A. They're not required as part of</p> <p>6 a report of this nature.</p> <p>7 Q. How confident are you in the</p> <p>8 accuracy of your estimates?</p> <p>9 A. Given the standard errors that I</p> <p>10 saw, I feel confident in these point</p> <p>11 estimates.</p> <p>12 Q. How do you calculate an EI</p> <p>13 estimate using Professor King's software</p> <p>14 without generating a confidence interval?</p> <p>15 A. You generate the standard</p> <p>16 errors.</p> <p>17 Q. So is it correct that if you</p> <p>18 hadn't calculated a confidence interval,</p> <p>19 that means you also have not determined any</p> <p>20 particular confidence level for these</p> <p>21 estimates?</p> <p>22 A. I'm going to answer your</p> <p>23 question this way: In Gary King's 1997</p> <p>24 book, he discusses use of standard errors to</p> <p>25 come up with a potential confidence interval</p>

<p style="text-align: right;">Page 78</p> <p>1 Cole</p> <p>2 for his estimates, and he states there that</p> <p>3 given the underlying distribution that is</p> <p>4 assumed for his model, that exact confidence</p> <p>5 intervals are not appropriate. They're</p> <p>6 going to be approximations.</p> <p>7 So to answer your question --</p> <p>8 to -- that's how I'm going to answer your</p> <p>9 question.</p> <p>10 Q. All right. Let's take that in</p> <p>11 pieces.</p> <p>12 First in reference to Professor</p> <p>13 King's 1997 book, are you aware of any</p> <p>14 further work that has been done on the</p> <p>15 ecological inference technique in the last</p> <p>16 20 years?</p> <p>17 A. Yes, I am.</p> <p>18 Q. Are you aware of any additional</p> <p>19 work that has been done with specific</p> <p>20 reference to confidence intervals?</p> <p>21 A. Standard errors, but not</p> <p>22 necessarily confidence intervals.</p> <p>23 Q. What do you mean by that?</p> <p>24 A. I mean in articles published</p> <p>25 since 1997, authors refer to the standard</p>	<p style="text-align: right;">Page 80</p> <p>1 Cole</p> <p>2 A. Given Gary King's guidance, we</p> <p>3 could come up with the approximation to a</p> <p>4 confidence interval for these data.</p> <p>5 Q. So you could generate</p> <p>6 approximate confidence intervals for your</p> <p>7 estimates for the 2013 election?</p> <p>8 A. Yes.</p> <p>9 Q. But you did not generate</p> <p>10 approximate confidence intervals for the</p> <p>11 2013 election, correct?</p> <p>12 A. I reviewed the standard errors</p> <p>13 that were produced by EI and determined that</p> <p>14 they were small enough to have confidence in</p> <p>15 these estimates.</p> <p>16 Q. But you did not generate</p> <p>17 approximate confidence intervals for the</p> <p>18 estimates for the 2013 election, correct?</p> <p>19 A. I did not generate approximate</p> <p>20 confidence intervals in writing, but I</p> <p>21 examined the standard errors for each</p> <p>22 estimate.</p> <p>23 Q. So one more time, you did not</p> <p>24 generate approximate confidence intervals</p> <p>25 for the 2013 election estimates and write it</p>
<p style="text-align: right;">Page 79</p> <p>1 Cole</p> <p>2 errors are generated with the technique, but</p> <p>3 not necessarily getting into setting up</p> <p>4 confidence intervals.</p> <p>5 Q. If I use the term "confidence</p> <p>6 level," do you know what that means?</p> <p>7 A. Yes.</p> <p>8 Q. So do you have an understanding</p> <p>9 that a 95 percent confidence level is a</p> <p>10 standard confidence level in social science</p> <p>11 research?</p> <p>12 A. I'm going to answer it, it</p> <p>13 depends.</p> <p>14 Q. It depends on what?</p> <p>15 A. Depends upon what area of</p> <p>16 inquiry you're talking about.</p> <p>17 I'll give you some examples. If</p> <p>18 you have a directional hypothesis in social</p> <p>19 sciences, a 90 percent confidence interval</p> <p>20 can be set up. In the area of assessing the</p> <p>21 randomness of a sample, lower confidence</p> <p>22 intervals are often used.</p> <p>23 Q. Could you calculate confidence</p> <p>24 intervals for your estimates for the 2013</p> <p>25 election?</p>	<p style="text-align: right;">Page 81</p> <p>1 Cole</p> <p>2 down?</p> <p>3 A. I did not write them down,</p> <p>4 that's correct.</p> <p>5 Q. Did you generate approximate</p> <p>6 confidence intervals in your mind?</p> <p>7 A. I did.</p> <p>8 Q. Do you recall what those</p> <p>9 approximate confidence intervals were?</p> <p>10 A. I don't.</p> <p>11 Q. Do you recall whether they were</p> <p>12 large confidence intervals?</p> <p>13 A. There was a range of confidence</p> <p>14 intervals, but I felt they were tight enough</p> <p>15 to have confidence in these results.</p> <p>16 Q. How confident in these results</p> <p>17 are you?</p> <p>18 A. What do you mean by "confident"?</p> <p>19 Q. Are you very confident in these</p> <p>20 results?</p> <p>21 A. Yes.</p> <p>22 Q. So you are very confident in</p> <p>23 your estimate that Pierre Germain received</p> <p>24 91.8 percent of non-Hispanic Black voters</p> <p>25 votes in 2013?</p>

<p style="text-align: right;">Page 82</p> <p>1 Cole</p> <p>2 MR. GROSSMAN: Objection.</p> <p>3 Q. Is that right?</p> <p>4 A. I analyzed racially polarized</p> <p>5 voting in several ways for this report. I</p> <p>6 did correlation analysis, I did EI, I did</p> <p>7 homogenous precinct analysis. I also did</p> <p>8 supplemental qualitative research. I took</p> <p>9 what is called a mixed method approach to</p> <p>10 doing this study, which has been prevalent</p> <p>11 now for about 20 years, where you use both</p> <p>12 quantitative and qualitative information to</p> <p>13 assess some research question.</p> <p>14 Q. Okay. But with respect to your</p> <p>15 EI analysis, are you very confident in your</p> <p>16 estimate that Pierre Germain received 91.8</p> <p>17 percent of Black voters votes in the 2013</p> <p>18 election?</p> <p>19 A. Given these other kinds of data</p> <p>20 and results that I have, I find that these</p> <p>21 estimates don't square with the other</p> <p>22 approaches. As a matter of fact -- I'm just</p> <p>23 going to leave it at that.</p> <p>24 Q. Does that mean you are not</p> <p>25 confident that Pierre Germain receive 91.8</p>	<p style="text-align: right;">Page 84</p> <p>1 Cole</p> <p>2 not confident in the overall pattern of</p> <p>3 results given the correlations, given the</p> <p>4 supplemental data that this reflects what's</p> <p>5 going on.</p> <p>6 Q. Okay. With specific reference</p> <p>7 to your estimate that 91.8 percent of</p> <p>8 non-Hispanic Black voters voted for Pierre</p> <p>9 Germain in 2013, are you confident in that</p> <p>10 estimate?</p> <p>11 A. Given that the estimate is</p> <p>12 disparate from the other pieces of data and</p> <p>13 results, I'm not confident.</p> <p>14 Q. Did you do something different</p> <p>15 in your EI analysis of 2013 that you did not</p> <p>16 do for other years?</p> <p>17 A. I performed it the same way I</p> <p>18 did the other years.</p> <p>19 Q. Did you use the same data for</p> <p>20 the 2013 election that you used for the</p> <p>21 other years?</p> <p>22 A. How could you use the same data?</p> <p>23 Q. Did you use the same sort of</p> <p>24 data?</p> <p>25 A. The same sort of data, yes.</p>
<p style="text-align: right;">Page 83</p> <p>1 Cole</p> <p>2 percent of Black voters votes in 2013?</p> <p>3 A. I think at one point of my</p> <p>4 report I wrote that I felt that these</p> <p>5 results were inconclusive.</p> <p>6 Q. If these results are</p> <p>7 inconclusive, does that mean that you are</p> <p>8 not confident in your estimate that Pierre</p> <p>9 Germain received 91.8 percent of Black</p> <p>10 voters votes in 2013?</p> <p>11 A. Could you repeat that?</p> <p>12 Q. If you regard these estimates as</p> <p>13 inconclusive, does that mean that you are</p> <p>14 not confident that Pierre Germain received</p> <p>15 91.8 percent of non-Hispanic Black voters</p> <p>16 votes in 2013?</p> <p>17 A. What I am inconclusive about is</p> <p>18 whether or not these results reflect</p> <p>19 racially polarized voting.</p> <p>20 Q. Does that mean that you are, in</p> <p>21 fact, confident that Pierre Germain received</p> <p>22 91.8 percent of Black voters votes in 2013?</p> <p>23 A. Given the EI result and its</p> <p>24 standard error, that would indicate a</p> <p>25 relative tight confidence interval, but I am</p>	<p style="text-align: right;">Page 85</p> <p>1 Cole</p> <p>2 Q. So you used the same sort of</p> <p>3 data for the 2013 EI estimate that you used</p> <p>4 for the other years, correct?</p> <p>5 A. Correct.</p> <p>6 Q. But you are not confident in</p> <p>7 your EI estimates for the 2013 election; is</p> <p>8 that right?</p> <p>9 A. That's right.</p> <p>10 Q. Before moving on, I had a</p> <p>11 question about methodology.</p> <p>12 In this table you report</p> <p>13 "Percentage of Latino voters voting for</p> <p>14 candidate, EI," "Percentage non-Hispanic</p> <p>15 Black Voters" and "Percentage Non-Hispanic</p> <p>16 White Voters," correct?</p> <p>17 A. Yes.</p> <p>18 Q. What about other racial</p> <p>19 categories in the district, do they figure</p> <p>20 into your analysis?</p> <p>21 A. Each set of racial data is run</p> <p>22 separately; so that Latinos versus everybody</p> <p>23 else, Blacks versus everybody else, Whites</p> <p>24 versus everybody else. So the vote totals</p> <p>25 include Asians.</p>

<p style="text-align: right;">Page 86</p> <p>1 Cole</p> <p>2 Q. So if I were to add up the</p> <p>3 percentage -- if I were to turn your</p> <p>4 percentage of Latino voters into real</p> <p>5 numbers and the percentage of Black voters</p> <p>6 into real numbers and the percentage of</p> <p>7 White voters into real numbers, they would</p> <p>8 not add up to the total vote count in the</p> <p>9 last column?</p> <p>10 A. That's right.</p> <p>11 Q. Let's turn to page 28 of your</p> <p>12 report. Paragraph 64 has an underlined</p> <p>13 sentence that says, "Supplemental Evidence</p> <p>14 Regarding Circumstances of the 2013 Board</p> <p>15 Contests." Do you see that?</p> <p>16 A. I do.</p> <p>17 Q. What is "supplemental evidence"?</p> <p>18 A. This is evidence that I</p> <p>19 collected to give factual context to the</p> <p>20 racial bloc voting estimates.</p> <p>21 Q. Is there some recognized method</p> <p>22 of collecting and analyzing supplemental</p> <p>23 evidence that I could find in the literature</p> <p>24 around ecological inference analysis?</p> <p>25 A. Not necessarily an ecological</p>	<p style="text-align: right;">Page 88</p> <p>1 Cole</p> <p>2 NYSED, N-Y-S-E-D, the NYSED website.</p> <p>3 Q. Why is the racial makeup of the</p> <p>4 schools relevant evidence with respect to</p> <p>5 the economic -- ecological inference</p> <p>6 analysis of the 2013 elections?</p> <p>7 A. There are three kinds of</p> <p>8 quantitative analyses that I did;</p> <p>9 correlational, ecological inference and</p> <p>10 homogenous precinct analysis. From those</p> <p>11 three sets of quantitative analyses, I</p> <p>12 generated racial bloc voting -- racially</p> <p>13 polarized voting estimates.</p> <p>14 Q. Is the racial makeup of the</p> <p>15 schools in the public school district</p> <p>16 relevant to your ecological inference</p> <p>17 analysis?</p> <p>18 A. I wasn't finished answering.</p> <p>19 Q. Okay.</p> <p>20 A. When you posed the question to</p> <p>21 me, all you cited was EI, and I just want to</p> <p>22 clarify that you mentioned ecological</p> <p>23 inference. There are other quantitative</p> <p>24 measures that I used; the correlational, EI</p> <p>25 and HPA.</p>
<p style="text-align: right;">Page 87</p> <p>1 Cole</p> <p>2 inference analysis, but in terms of mixed</p> <p>3 method methodologies, yes.</p> <p>4 Q. Did you follow some</p> <p>5 professionally recognized methodology in</p> <p>6 analyzing and collecting supplemental</p> <p>7 evidence regarding the 2013 board contests?</p> <p>8 A. I did.</p> <p>9 Q. What method was that?</p> <p>10 A. In collecting such evidence you</p> <p>11 want to use a representative sample of data</p> <p>12 and in this case in and around the</p> <p>13 particular contest at hand.</p> <p>14 Q. Do you believe that you had a</p> <p>15 representative sample of supplemental</p> <p>16 evidence regarding the 2013 election?</p> <p>17 A. With respect to the news</p> <p>18 articles, I do.</p> <p>19 Q. Do you not with respect to other</p> <p>20 types of supplemental evidence?</p> <p>21 A. Well, the other kind of</p> <p>22 supplemental evidence that I collected here</p> <p>23 deals with the New York State educational</p> <p>24 data on racial makeup of the schools, and</p> <p>25 that's just direct information from the</p>	<p style="text-align: right;">Page 89</p> <p>1 Cole</p> <p>2 Q. Right.</p> <p>3 I'm interested in EI because you</p> <p>4 testified you're not confident in your</p> <p>5 estimates using EI for the 2013 election.</p> <p>6 The question is: Is the racial</p> <p>7 makeup of the district's public school</p> <p>8 relative to ecological inference analysis of</p> <p>9 the 2013 election?</p> <p>10 A. I think the two sets of</p> <p>11 information informed one another. I think</p> <p>12 it's -- so the supplemental information</p> <p>13 generates a factual context, the environment</p> <p>14 in which people are voting.</p> <p>15 You have a situation where</p> <p>16 public school advocates support a slate of</p> <p>17 candidates whose agenda is one that is</p> <p>18 largely favorable to public schools. My</p> <p>19 analyses indicate that those candidates</p> <p>20 always lose.</p> <p>21 You have another dimension to</p> <p>22 the community where slates of candidates</p> <p>23 supported by private school interests</p> <p>24 support them. They invariably win.</p> <p>25 This is in a setting where</p>

<p style="text-align: right;">Page 90</p> <p>1 Cole</p> <p>2 public school advocates are invested in</p> <p>3 schools that are virtually all minority,</p> <p>4 you've got private school advocates</p> <p>5 promoting a slate of candidates, and</p> <p>6 that private school interests lies in</p> <p>7 schools that are virtually all White.</p> <p>8 I'm not finished. And I believe</p> <p>9 that that kind of information is important</p> <p>10 for the court to consider.</p> <p>11 Q. When you say "public school</p> <p>12 advocates," is that the same as a phrase you</p> <p>13 also use in your report "public school</p> <p>14 community"; do you recall that phrase?</p> <p>15 A. Yes.</p> <p>16 Q. Is everyone in the public school</p> <p>17 community from your understanding Black and</p> <p>18 Latino?</p> <p>19 A. No.</p> <p>20 Q. Are there White people that you</p> <p>21 would say qualify as public school advocates</p> <p>22 in your understanding?</p> <p>23 A. Yes.</p> <p>24 Q. Does being a public school</p> <p>25 advocate say anything about whether a person</p>	<p style="text-align: right;">Page 92</p> <p>1 Cole</p> <p>2 people?</p> <p>3 A. Not necessarily just them, but</p> <p>4 much of the material I see is from them.</p> <p>5 Q. So is that right, mainly</p> <p>6 Orthodox and Hasidic Jewish people?</p> <p>7 A. I'd probably go along with that.</p> <p>8 Q. When you say "private school</p> <p>9 community," you mean mainly Orthodox and</p> <p>10 Hasidic Jewish people?</p> <p>11 A. I'd go along with that.</p> <p>12 MR. GROSSMAN: Off the record.</p> <p>13 (Discussion off the record.)</p> <p>14 Q. Turning back to the 2013</p> <p>15 election results reported on the bottom of</p> <p>16 page 40 of your report, let's walk through</p> <p>17 these.</p> <p>18 Starting with the race for the</p> <p>19 seat of Moses Friedman in 2013, in the</p> <p>20 column "Percent Latino voters voting for</p> <p>21 candidate, EI," you are not confident in</p> <p>22 your estimate that 99.6 percent of Latino</p> <p>23 voters voted for Margaret Tuck, correct?</p> <p>24 A. That's not correct.</p> <p>25 Q. Are you confident in your</p>
<p style="text-align: right;">Page 91</p> <p>1 Cole</p> <p>2 is Black or White?</p> <p>3 A. Not necessarily.</p> <p>4 Q. When you say "private school</p> <p>5 interests," is that the same as the phrase</p> <p>6 "private school community" that you also use</p> <p>7 in your report?</p> <p>8 A. It's similar.</p> <p>9 Q. When you say "private school</p> <p>10 community," you mean Orthodox and Hasidic</p> <p>11 Jews in East Ramapo?</p> <p>12 A. Not necessarily.</p> <p>13 Q. Mainly Orthodox and Hasidic</p> <p>14 Jews?</p> <p>15 A. Much of the materials reviewed</p> <p>16 were spoken or written by folks of the</p> <p>17 Jewish faith.</p> <p>18 Q. By "private school community,"</p> <p>19 do you mean mainly Orthodox and Hasidic</p> <p>20 Jewish people?</p> <p>21 A. The materials I found are</p> <p>22 generated largely by them, yes.</p> <p>23 Q. Just so I understand, when you</p> <p>24 refer to the "private school community," you</p> <p>25 mean mainly Orthodox and Hasidic Jewish</p>	<p style="text-align: right;">Page 93</p> <p>1 Cole</p> <p>2 estimate that 99.6 percent of the Latino</p> <p>3 voters voted for Margaret Tuck in 2013?</p> <p>4 A. Yes.</p> <p>5 Q. But you are not confident in</p> <p>6 your estimate that 29.3 percent of Black</p> <p>7 voters voted for Margaret Tuck; is that</p> <p>8 correct?</p> <p>9 A. That's correct.</p> <p>10 Q. Why are you confident in one</p> <p>11 estimate, but not the other?</p> <p>12 A. For one, the Latino information,</p> <p>13 when you compare these results with the</p> <p>14 correlation analysis, they're consistent.</p> <p>15 When you compare the estimates for the Black</p> <p>16 voters with the correlational evidence,</p> <p>17 they're not consistent.</p> <p>18 Q. Let's come back to that. I need</p> <p>19 your answers for the rest of these.</p> <p>20 Are you confident in your</p> <p>21 estimate that 30.5 percent of non-Hispanic</p> <p>22 White voters voted for Margaret Tuck?</p> <p>23 A. I am.</p> <p>24 Q. So with respect to this race, is</p> <p>25 the only estimate that you are not confident</p>

<p style="text-align: right;">Page 94</p> <p>1 Cole</p> <p>2 in your estimate of the percentage of</p> <p>3 non-Hispanic Black voters?</p> <p>4 A. That's correct.</p> <p>5 Q. Let's look at the seat of Nathan</p> <p>6 Losman, are you confident in your estimate</p> <p>7 that Eustache Clerveaux received 99.5</p> <p>8 percent of voters voting -- of Latino</p> <p>9 voters?</p> <p>10 A. Yes.</p> <p>11 Q. And are you confident in your</p> <p>12 estimate that 30.2 percent of White voters</p> <p>13 voted for Eustache Clerveaux?</p> <p>14 A. Yes.</p> <p>15 Q. Are you confident in your</p> <p>16 estimate that 7.6 percent of Black voters</p> <p>17 voted for Eustache Clerveaux?</p> <p>18 A. No.</p> <p>19 Q. Looking at the seat of Bernard</p> <p>20 Charles, are you confident in your estimate</p> <p>21 that 99.4 percent of Latino voters voted for</p> <p>22 Robert Forrest?</p> <p>23 A. Yes.</p> <p>24 Q. Are you confident in your</p> <p>25 estimate that 31.6 percent of non-Hispanic</p>	<p style="text-align: right;">Page 96</p> <p>1 Cole</p> <p>2 for Black voters are not consistent with the</p> <p>3 correlation analyses.</p> <p>4 Q. Are you saying that the</p> <p>5 correlation analysis is more reliable than</p> <p>6 the ecological inference analysis?</p> <p>7 A. I'm not.</p> <p>8 Q. Why would you -- strike that.</p> <p>9 Do you give more weight to the</p> <p>10 correlation analysis than to the ecological</p> <p>11 inference analysis?</p> <p>12 A. Not necessarily.</p> <p>13 Q. Are you giving more weight to</p> <p>14 the correlation analysis in your estimates</p> <p>15 for the percentage of Black voters than you</p> <p>16 are giving it in other categories?</p> <p>17 A. Not necessarily more weight.</p> <p>18 Q. Not necessarily more weight.</p> <p>19 Are you crediting the</p> <p>20 correlation analysis more than the</p> <p>21 ecological inference analysis for your</p> <p>22 estimates of percentage of Black voters</p> <p>23 voting for the candidates in 2013?</p> <p>24 A. Not necessarily.</p> <p>25 Q. What do you mean by "not</p>
<p style="text-align: right;">Page 95</p> <p>1 Cole</p> <p>2 White voters voted for Robert Forrest?</p> <p>3 A. Yes.</p> <p>4 Q. Are you confident in your</p> <p>5 estimate that 10.6 percent of non-Hispanic</p> <p>6 Black voters voted for Robert Forrest?</p> <p>7 A. No.</p> <p>8 Q. Did you do anything different</p> <p>9 methodically in estimating the percentage of</p> <p>10 Black voter support for candidates in May</p> <p>11 21, 2013?</p> <p>12 MR. GROSSMAN: Objection.</p> <p>13 A. Different than what?</p> <p>14 Q. Different than the methodology</p> <p>15 you used for the percent of Latino voters?</p> <p>16 A. No, the same methods.</p> <p>17 Q. The same sorts of data?</p> <p>18 A. The same sorts of data.</p> <p>19 Q. Why are you confident in your</p> <p>20 estimates for percentage of Latino voter</p> <p>21 support and not percentage for non-Hispanic</p> <p>22 Black voter support?</p> <p>23 A. Those estimates are consistent</p> <p>24 with the correlational analysis, the</p> <p>25 estimates for the Latino. The EI estimates</p>	<p style="text-align: right;">Page 97</p> <p>1 Cole</p> <p>2 necessarily"?</p> <p>3 A. There is no formal weighting</p> <p>4 process. There is a discrepancy between the</p> <p>5 two, which would lead me to have less</p> <p>6 confidence in the disparate Black findings.</p> <p>7 Q. Why does the correlation</p> <p>8 analysis that you performed influence your</p> <p>9 confidence in your estimates generated by</p> <p>10 ecological inference?</p> <p>11 A. Gary King himself suggests that</p> <p>12 when you have results that don't necessarily</p> <p>13 fit an established pattern that you need to</p> <p>14 look at other sources of information to</p> <p>15 establish confidence in the EI results. And</p> <p>16 he specifically suggests going to</p> <p>17 supplemental evidence, such as journalistic</p> <p>18 accounts, so I have journalistic accounts, I</p> <p>19 have correlation analyses, I compared the</p> <p>20 White EI to the HPA. They're consistent.</p> <p>21 Q. So the difference between the</p> <p>22 percentage of Latino voters voting for a</p> <p>23 candidate and Black voters voting for a</p> <p>24 candidate is that the percentages you</p> <p>25 estimated for Black voters did not fit your</p>

<p style="text-align: right;">Page 98</p> <p>1 Cole</p> <p>2 expected pattern?</p> <p>3 A. Not an expected pattern. A</p> <p>4 pattern of the other data before us. I</p> <p>5 didn't have expectations, just established</p> <p>6 patterns.</p> <p>7 Q. Is it possible for the</p> <p>8 correlation analysis and the ecological</p> <p>9 inference analysis for the Black voters</p> <p>10 voting for the candidate to both be correct?</p> <p>11 A. It's possible.</p> <p>12 Q. Why do you assume then that the</p> <p>13 percentage of Black voters voting for a</p> <p>14 candidate that you generated using</p> <p>15 ecological inference is incorrect?</p> <p>16 A. I didn't say incorrect. I said</p> <p>17 I have less confidence in them, and I -- in</p> <p>18 terms of the quantitative results, I find</p> <p>19 them basically in the EI inconclusive. I</p> <p>20 don't have an answer for you.</p> <p>21 Q. In paragraph 28 of your report</p> <p>22 in describing correlation analysis you say</p> <p>23 that "if there are only a small number of</p> <p>24 precincts, no matter how strong the actual</p> <p>25 racial polarization, one may not be able to</p>	<p style="text-align: right;">Page 100</p> <p>1 Cole</p> <p>2 A. Do you want to repeat that?</p> <p>3 Q. Yes.</p> <p>4 In 2013 for that particular</p> <p>5 analysis, were ten precincts sufficient to</p> <p>6 obtain a high level of statistical</p> <p>7 significance in your measurement of the</p> <p>8 degree of polarization?</p> <p>9 A. That question is illogical to</p> <p>10 me.</p> <p>11 The point I'm making in the</p> <p>12 report is that with a sample size of ten,</p> <p>13 you don't necessarily have to rely on a high</p> <p>14 level of statistical significance to rely on</p> <p>15 it.</p> <p>16 Q. Right.</p> <p>17 I'm asking whether you were able</p> <p>18 to obtain a high level of statistical</p> <p>19 significance.</p> <p>20 MR. GROSSMAN: Objection.</p> <p>21 A. There was a -- for 2013 there</p> <p>22 were -- there was statistical significance</p> <p>23 for Latinos in the correlation, there were</p> <p>24 statistical significance for the Whites, but</p> <p>25 not for the Blacks, but -- I'm sorry, I've</p>
<p style="text-align: right;">Page 99</p> <p>1 Cole</p> <p>2 obtain a high level of statistical</p> <p>3 significance in the measurement of the</p> <p>4 degree of polarization." Do you see that?</p> <p>5 A. I do.</p> <p>6 Q. Are ten precincts sufficient to</p> <p>7 obtain a high level of statistical</p> <p>8 significance in the measurement of the</p> <p>9 degree of polarization using correlation</p> <p>10 analysis?</p> <p>11 A. It depends.</p> <p>12 Q. In this case?</p> <p>13 A. It depends upon the distribution</p> <p>14 of the data.</p> <p>15 My point here was that with a</p> <p>16 sample size of ten, you can generate a</p> <p>17 strong correlation coefficient, a big</p> <p>18 effect, but not necessarily be statistically</p> <p>19 significant. It's just a function of the</p> <p>20 sample size.</p> <p>21 Q. In this case, the specific</p> <p>22 reference to May 21, 2013, were ten</p> <p>23 precincts sufficient to obtain a high level</p> <p>24 of statistical significance in the</p> <p>25 measurement of the degree of polarization?</p>	<p style="text-align: right;">Page 101</p> <p>1 Cole</p> <p>2 finished my answer.</p> <p>3 Q. Okay. In your answer, when you</p> <p>4 referred to the statistical significance for</p> <p>5 Latino voters and the White voters, was</p> <p>6 there a high level of statistical</p> <p>7 significance?</p> <p>8 A. There is no necessary absolute</p> <p>9 threshold as to what a high level of</p> <p>10 statistical significance is.</p> <p>11 Q. In your expert opinion, did you</p> <p>12 obtain a high level of statistical</p> <p>13 significance?</p> <p>14 MR. GROSSMAN: Objection.</p> <p>15 A. I don't have an absolute</p> <p>16 threshold as to what a high level of</p> <p>17 statistical significance is. I would say</p> <p>18 that a value of less than .001 is a greater</p> <p>19 degree of significance than .021.</p> <p>20 MR. LEVINE: Let's take that</p> <p>21 break.</p> <p>22 (Luncheon recess: 1:30 p.m.)</p> <p>23</p> <p>24</p> <p>25</p>

<p style="text-align: right;">Page 102</p> <p>1 Cole</p> <p>2 AFTERNOON SESSION</p> <p>3 (Time noted: 2:13 p.m.)</p> <p>4 STEVEN P COLE, P h D, resumed</p> <p>5 and testified as follows:</p> <p>6 EXAMINATION BY (CONT'D.)</p> <p>7 MR. LEVINE:</p> <p>8 MR. LEVINE: Could you read back</p> <p>9 for the witness the last question and</p> <p>10 answer so we can pick up where we left</p> <p>11 off?</p> <p>12 (Record read.)</p> <p>13 Q. Turning to the document marked</p> <p>14 as Cole Exhibit 2, your expert report, turn</p> <p>15 to page 43 at the bottom of the page. This</p> <p>16 is a "Summary of the Correlation Analyses</p> <p>17 for the May 21, 2013 Elections," correct?</p> <p>18 A. Correct.</p> <p>19 Q. Did you obtain statistical</p> <p>20 significance for the percentage of</p> <p>21 non-Hispanic Black voters voting for</p> <p>22 candidate for the seat of Moses Friedman?</p> <p>23 A. No.</p> <p>24 Q. For the seat of Nathan Losman,</p> <p>25 did you obtain statistical significance in</p>	<p style="text-align: right;">Page 104</p> <p>1 Cole</p> <p>2 follow along, that sentence says, "For the</p> <p>3 correlation analysis, a single regression is</p> <p>4 preferred where the researcher seeks the</p> <p>5 association between the racial composition</p> <p>6 of the precincts and the percentage of the</p> <p>7 votes cast for candidates." Do you see</p> <p>8 that?</p> <p>9 A. I do.</p> <p>10 Q. You have a footnote to Footnote</p> <p>11 17. Do you see that there?</p> <p>12 A. I do.</p> <p>13 Q. And you're citing for that</p> <p>14 proposition to an article by James Loewen</p> <p>15 and Bernard Grofman, "Recent Developments in</p> <p>16 Methods Used in Voting Right Litigation,"</p> <p>17 Urban Lawyer 1989, correct?</p> <p>18 A. Correct.</p> <p>19 Q. Did you perform a single</p> <p>20 regression analysis like you have described</p> <p>21 here?</p> <p>22 A. Let me clarify what I did. The</p> <p>23 same variables are used to calculate a</p> <p>24 correlation coefficient that are used in the</p> <p>25 setup for the regression, and you get</p>
<p style="text-align: right;">Page 103</p> <p>1 Cole</p> <p>2 the estimate for the percentage of</p> <p>3 non-Hispanic Black voters voting for</p> <p>4 candidate?</p> <p>5 A. Could you repeat that?</p> <p>6 Q. Sure.</p> <p>7 The same question for seat of</p> <p>8 Moses Friedman that we asked, the same</p> <p>9 question for the seat of Nathan Losman. Did</p> <p>10 you achieve statistical significance for</p> <p>11 your estimate for the percentage of</p> <p>12 non-Hispanic Black voters voting for</p> <p>13 candidate?</p> <p>14 A. For the seat of Nathan Losman,</p> <p>15 no.</p> <p>16 Q. The same question for the seat</p> <p>17 of Bernard Charles on page 44, did you</p> <p>18 obtain statistical significance for the</p> <p>19 estimate for the percentage of non-Hispanic</p> <p>20 Black voters voting for candidate?</p> <p>21 A. No.</p> <p>22 Q. Let's turn to page 11 of your</p> <p>23 report, the bottom of the page, the last</p> <p>24 sentence at the bottom of page that runs to</p> <p>25 the top of page 12. Just so everybody can</p>	<p style="text-align: right;">Page 105</p> <p>1 Cole</p> <p>2 various results from the -- from that kind</p> <p>3 of analysis. One is the correlation which</p> <p>4 is the association between the two</p> <p>5 variables. You can also use the regression</p> <p>6 to get estimates of racial bloc voting. I</p> <p>7 did not do that. What I used the single</p> <p>8 regression for was to get the correlation</p> <p>9 coefficients.</p> <p>10 Q. Why?</p> <p>11 A. To answer the question in</p> <p>12 general, is there an association between</p> <p>13 racial composition of the precincts and</p> <p>14 voter outcome.</p> <p>15 Q. What is the distinction? I'm</p> <p>16 not sure I understand the distinction that</p> <p>17 you've drawn.</p> <p>18 A. Correlation between the racial</p> <p>19 composition of the precincts and the</p> <p>20 outcome, it's a measurement of association.</p> <p>21 Are they associated, those two measures. If</p> <p>22 one increases, does the other increase. You</p> <p>23 would use the results of the regression as a</p> <p>24 more of a prediction. Does -- and the</p> <p>25 regression is more of a form Y equals Ax</p>

<p style="text-align: right;">Page 106</p> <p>1 Cole</p> <p>2 plus B, the equation for a straight line,</p> <p>3 where you would get -- you could figure out</p> <p>4 White crossover voting for that and an</p> <p>5 estimate of Black cohesion.</p> <p>6 Q. So that makes sense.</p> <p>7 Is it possible to do one without</p> <p>8 doing the other, right; don't you have to do</p> <p>9 the first step to do the regression?</p> <p>10 A. You could just run the</p> <p>11 correlation all by itself.</p> <p>12 Q. But to do the regression, you</p> <p>13 have to run the correlation, right, because</p> <p>14 you have to regress something?</p> <p>15 A. You could report those</p> <p>16 regression estimates without reporting the</p> <p>17 correlation. I mean, they can be done</p> <p>18 separately.</p> <p>19 Q. Maybe they could be reported</p> <p>20 separately, but can you actually do the</p> <p>21 analysis without -- can you actually do the</p> <p>22 regression analysis without doing the</p> <p>23 correlation analysis?</p> <p>24 A. Yes.</p> <p>25 Q. How do you do that?</p>	<p style="text-align: right;">Page 108</p> <p>1 Cole</p> <p>2 in Footnote 17?</p> <p>3 A. I have. It's been a while, but</p> <p>4 I have.</p> <p>5 MR. LEVINE: Let's mark the</p> <p>6 article as Cole Exhibit 3.</p> <p>7 (Cole Exhibit 3, article cited</p> <p>8 in Footnote 17 of expert report,</p> <p>9 marked for identification, as of this</p> <p>10 date.)</p> <p>11 Q. So I can represent to you that</p> <p>12 this is the copy of the article that was</p> <p>13 provided to us by plaintiffs' counsel, and I</p> <p>14 believe it's the same as the article cited</p> <p>15 in Footnote 17.</p> <p>16 Take a look at what is marked</p> <p>17 page 595 in the article at the top of the</p> <p>18 page.</p> <p>19 A. I'm on page 595.</p> <p>20 Q. At the bottom of this page there</p> <p>21 is a paragraph, and just so everybody can</p> <p>22 follow along, I'll just read a couple of</p> <p>23 sentences because I want to ask you a</p> <p>24 question about them. Starting with the word</p> <p>25 "however" in the middle the paragraph, do</p>
<p style="text-align: right;">Page 107</p> <p>1 Cole</p> <p>2 A. The same data -- if you're --</p> <p>3 you need the same data to run both, let's</p> <p>4 put it that way.</p> <p>5 Q. What you are saying is that you</p> <p>6 could just run different programs and it</p> <p>7 will generate a different report?</p> <p>8 A. Yes.</p> <p>9 Q. On page 11, same sentence, you</p> <p>10 say, "a single regression is preferred where</p> <p>11 the researcher seeks the association between</p> <p>12 the racial composition of the precincts and</p> <p>13 the percentage of the votes cast for a</p> <p>14 candidate." What do you mean by</p> <p>15 "preferred"?</p> <p>16 A. So the single regression is</p> <p>17 preferred where you use, as an example,</p> <p>18 percent Black CVAP as the predictor variable</p> <p>19 and percent of the vote cast for candidate</p> <p>20 A. There are other regressions that could</p> <p>21 be used to generate correlations. I</p> <p>22 preferred what is called this Goodman's</p> <p>23 single regression. That's what I meant by</p> <p>24 that.</p> <p>25 Q. Have you read the article cited</p>	<p style="text-align: right;">Page 109</p> <p>1 Cole</p> <p>2 you see where I am?</p> <p>3 A. I do.</p> <p>4 Q. "However, voting rights cases</p> <p>5 usually involve seeing if there are</p> <p>6 important differences between White and</p> <p>7 Black RBV, not calculating specific and</p> <p>8 exact estimates of the amount of RBV of each</p> <p>9 group, thus errors introduced by ordinary</p> <p>10 single equation regression are usually of</p> <p>11 modest legal importance because regression</p> <p>12 results usually show major differences</p> <p>13 between White support for White candidates</p> <p>14 and Black support for White candidate," and</p> <p>15 then there is a footnote.</p> <p>16 Have you followed along with me</p> <p>17 so far?</p> <p>18 A. Yes.</p> <p>19 Q. Did you perform a single</p> <p>20 equation regression of the type described in</p> <p>21 the sentence I just read in this case?</p> <p>22 A. I'm just going to make sure.</p> <p>23 I'm going to look at the graph on page 595.</p> <p>24 And for the X-axis, it's percent of White</p> <p>25 registered, and on the Y-axis or ordinate,</p>

<p style="text-align: right;">Page 110</p> <p>1 Cole</p> <p>2 it's percent of Black vote of registered</p> <p>3 voters, I assume, for some candidate.</p> <p>4 So to answer your question, I</p> <p>5 used the correlation coefficient from such</p> <p>6 an analysis, not the racial bloc voting</p> <p>7 estimates.</p> <p>8 Q. So you did do a single equation</p> <p>9 regression, but with different inputs,</p> <p>10 right; is that a fair characterization?</p> <p>11 A. No, the same inputs.</p> <p>12 Q. The same inputs, not a single</p> <p>13 equation regression?</p> <p>14 A. Same inputs, single regression,</p> <p>15 but reported the correlation coefficient</p> <p>16 from it, not the racial bloc voting</p> <p>17 estimates, which this paragraph is dealing</p> <p>18 with.</p> <p>19 Q. Okay. Take a look at Footnote 5</p> <p>20 on the other page, and just so everybody can</p> <p>21 follow along, I'll read it. "Two</p> <p>22 circumstances can make the errors larger.</p> <p>23 If neither turnout nor registration data are</p> <p>24 available, the analyst must use voting age</p> <p>25 population data for the independent</p>	<p style="text-align: right;">Page 112</p> <p>1 Cole</p> <p>2 variable, correct?</p> <p>3 A. Correct.</p> <p>4 Q. For your correlation analysis,</p> <p>5 you had three racial categories, right;</p> <p>6 White, Latino and Black, correct?</p> <p>7 A. Correct.</p> <p>8 Q. Isn't this footnote saying that</p> <p>9 where you have both of those conditions</p> <p>10 using the voting age population data and</p> <p>11 with more than two racial categories</p> <p>12 estimates can be off by large margins using</p> <p>13 a single regression?</p> <p>14 A. I did not use the single</p> <p>15 regression to generate racial bloc voting</p> <p>16 estimates.</p> <p>17 Q. Right.</p> <p>18 Does that mean that the</p> <p>19 correlation analysis would not be subject to</p> <p>20 large errors?</p> <p>21 A. Those are two independent</p> <p>22 situations.</p> <p>23 Q. Why?</p> <p>24 A. For the correlation analysis, we</p> <p>25 are simply looking at the association</p>
<p style="text-align: right;">Page 111</p> <p>1 Cole</p> <p>2 variable. Using inconsistent denominators</p> <p>3 with VAP data inadvertently assumes that</p> <p>4 registration as well turnout and roll-on are</p> <p>5 identical for each group. Also the presence</p> <p>6 of Hispanic, Asians or Native Americans in</p> <p>7 addition to Whites and Blacks can cause</p> <p>8 estimates to be off by large amounts. Using</p> <p>9 inconsistent denominators because these</p> <p>10 groups may not be registered in the same</p> <p>11 proportion as Whites or Black. Moreover,</p> <p>12 their residential distribution may be</p> <p>13 somewhat correlated with Whites or with</p> <p>14 Blacks requiring appropriate statistical</p> <p>15 techniques to avoid specification error."</p> <p>16 So the question with respect to</p> <p>17 this case is: Am I correct that for your</p> <p>18 correlation analysis you did not use either</p> <p>19 turnout or registration data; is that right?</p> <p>20 A. I used -- for the estimate of</p> <p>21 racial compositions of the precincts, I</p> <p>22 used, for whatever race I was analyzing, the</p> <p>23 citizen voting age population.</p> <p>24 Q. You used the voting age</p> <p>25 population data for your independent</p>	<p style="text-align: right;">Page 113</p> <p>1 Cole</p> <p>2 between racial composition of the precincts</p> <p>3 and outcome. That was the analysis that was</p> <p>4 used in Gingles and that continues to be a</p> <p>5 form of analysis that is used in research</p> <p>6 related to analysis of racially polarized</p> <p>7 voting.</p> <p>8 Q. In Gingles do you know whether</p> <p>9 voting age population data was the</p> <p>10 independent variable that was used?</p> <p>11 A. I'm not sure. It was a North</p> <p>12 Carolina case. They may very well have had</p> <p>13 registration data by race. I'm not sure.</p> <p>14 Q. In Gingles do you know whether</p> <p>15 they were performing a correlation analysis</p> <p>16 with more than two racial categories?</p> <p>17 A. I think they were looking at</p> <p>18 Blacks and Whites.</p> <p>19 Q. Are you aware of any case where</p> <p>20 a correlation analysis was performed with a</p> <p>21 single regression where the independent</p> <p>22 variable that was used was voting age</p> <p>23 population data and there were three racial</p> <p>24 categories?</p> <p>25 A. Once again, in terms of my</p>

<p style="text-align: right;">Page 114</p> <p>1 Cole</p> <p>2 correlation results, I did not rely on a</p> <p>3 single regression. I simply correlated</p> <p>4 racial composition of a precinct with voter</p> <p>5 outcome, period.</p> <p>6 Q. When this methodology, this</p> <p>7 correlation analysis that you performed was</p> <p>8 developed in 1989 or thereabouts, had</p> <p>9 ecological inference been developed yet?</p> <p>10 A. First of all, I want to correct</p> <p>11 you. Correlation analysis was not developed</p> <p>12 in 1989. Correlation analysis has been</p> <p>13 around a long time.</p> <p>14 Q. Good point.</p> <p>15 When this article came out in</p> <p>16 1989, had ecological inference been</p> <p>17 developed yet?</p> <p>18 A. Gary King's book was published</p> <p>19 in 1997.</p> <p>20 Q. Nothing in this article would</p> <p>21 suggest that the correlation analysis should</p> <p>22 be used to check results of an ecological</p> <p>23 inference analysis, right?</p> <p>24 A. I don't think Jim Loewen or</p> <p>25 Bernie Grofman were aware of EI at that</p>	<p style="text-align: right;">Page 116</p> <p>1 Cole</p> <p>2 Q. Is it possible for that</p> <p>3 correlation to be reliable and also for your</p> <p>4 estimate that you generated using an</p> <p>5 ecological inference also be reliable?</p> <p>6 A. It's possible.</p> <p>7 Q. Do you think that both those</p> <p>8 results are reliable here?</p> <p>9 A. It's possible.</p> <p>10 Q. It's possible, all right. Good.</p> <p>11 Let's turn back to page 31,</p> <p>12 paragraph 68. The final sentence in</p> <p>13 paragraph 68 says, "However, EI results</p> <p>14 indicated that Black preferred and White</p> <p>15 preferred candidates were successful."</p> <p>16 Is that your opinion as you sit</p> <p>17 here today?</p> <p>18 A. It is, but it's qualified by</p> <p>19 something I said later.</p> <p>20 Q. Well, let's look at paragraph 69</p> <p>21 where you say, "The supplemental evidence</p> <p>22 suggests Black and Latino voters preferred</p> <p>23 the losing candidates." So does that mean</p> <p>24 that the supplemental evidence leads you to</p> <p>25 a result that is the opposite of the EI</p>
<p style="text-align: right;">Page 115</p> <p>1 Cole</p> <p>2 point.</p> <p>3 Q. Turning back to the report on</p> <p>4 page 40, again the bottom of the page, back</p> <p>5 to the 2013 election results, and looking at</p> <p>6 the seat of Bernard Charles, as an example,</p> <p>7 you estimated using the ecological inference</p> <p>8 technique that 89.7 percent of Black voters</p> <p>9 voted for Bernard Charles, correct?</p> <p>10 A. Correct.</p> <p>11 Q. And you performed a correlation</p> <p>12 analysis and concluded that you did not</p> <p>13 achieve a statistical -- a result that was</p> <p>14 statistically significant, correct?</p> <p>15 MR. GROSSMAN: Objection.</p> <p>16 A. So the correlation analysis with</p> <p>17 respect to Bernard Charles showed a</p> <p>18 correlation of minus .50 with a p value of</p> <p>19 .142. I would not consider the .142</p> <p>20 statistically significant; however, as I</p> <p>21 pointed out in the report correlations of</p> <p>22 .50 are considered large correlations and in</p> <p>23 many social scientific areas that</p> <p>24 correlation of a .50 is relied upon. It's</p> <p>25 considered a large correlation.</p>	<p style="text-align: right;">Page 117</p> <p>1 Cole</p> <p>2 result?</p> <p>3 A. I would say that the</p> <p>4 supplemental evidence is contrary to what</p> <p>5 the EI results were.</p> <p>6 Q. Let's look at the things that</p> <p>7 you list here as the supplemental evidence</p> <p>8 that leads you to that conclusion.</p> <p>9 You point to, and I'm looking at</p> <p>10 the next sentence, Given the polarized</p> <p>11 racial composition of the public and private</p> <p>12 schools, the public endorsements of Save our</p> <p>13 Schools and SERTA, and Ms. Hatton's</p> <p>14 observations about the decisions of Germain,</p> <p>15 Charles and Corado not to campaign in public</p> <p>16 or to attend the candidate forum within the</p> <p>17 minority community. The evidence suggests</p> <p>18 that minority voters in the district would</p> <p>19 have been likely to prefer the candidates on</p> <p>20 the public school slate. And then you say,</p> <p>21 However, the private school slates messaging</p> <p>22 as reported by Ms. Hatton, as well as the</p> <p>23 fact that all six candidates were Black or</p> <p>24 Latino could have caused some Black voters</p> <p>25 to vote for the private school slate.</p>

<p style="text-align: right;">Page 118</p> <p>1 Cole</p> <p>2 I would like to take each of</p> <p>3 these in turn starting with the last.</p> <p>4 So who is Ms. Hatton?</p> <p>5 A. Ms. Hatton -- I'm going to go</p> <p>6 further back into the report -- she's a --</p> <p>7 I'm looking at my report, page 29,</p> <p>8 Ms. Hatton, who is a public school, quote,</p> <p>9 parent education activist in East Ramapo.</p> <p>10 Q. Did you speak with Ms. Hatton?</p> <p>11 A. No.</p> <p>12 Q. Do you know Ms. Hatton?</p> <p>13 A. No.</p> <p>14 Q. Is Ms. Hatton Black?</p> <p>15 A. My understanding is that she is</p> <p>16 not.</p> <p>17 Q. Is Ms. Hatton Latino?</p> <p>18 A. My understanding is that she is</p> <p>19 not.</p> <p>20 Q. Why is Ms. Hatton in your view a</p> <p>21 credible source of information about Black</p> <p>22 and Latino voter preference?</p> <p>23 A. Well, the school board</p> <p>24 identified three official newspaper sources</p> <p>25 and the Rockland Times was one of them, and</p>	<p style="text-align: right;">Page 120</p> <p>1 Cole</p> <p>2 reliable evidence about Black and minority</p> <p>3 voter preference unless you have reason to</p> <p>4 disbelieve them?</p> <p>5 A. This is a letter published in a</p> <p>6 paper that the public can read and I also</p> <p>7 included a letter from the Southeast</p> <p>8 Taxpayers Association, Ms. Kalman Weber,</p> <p>9 K-A-L-M-A-N.</p> <p>10 Q. Is that the article you're</p> <p>11 referencing in Footnote 60?</p> <p>12 A. Right.</p> <p>13 Q. Yes.</p> <p>14 Footnote 60 refers to an article</p> <p>15 from October 18, 2015?</p> <p>16 A. Right. I'm sorry. What I meant</p> <p>17 to say is in relation to 2013, I included</p> <p>18 the letter by Yehuda Weissmandl, president</p> <p>19 of the board, who countered Ms. Hatton.</p> <p>20 Q. Is Yehuda Weissmandl a credible</p> <p>21 source of evidence about Black and Latino</p> <p>22 voter preferences in East Ramapo?</p> <p>23 A. He's the president of the school</p> <p>24 board, and what these supplemental pieces of</p> <p>25 information demonstrate as to the subsequent</p>
<p style="text-align: right;">Page 119</p> <p>1 Cole</p> <p>2 she published this letter to the editor.</p> <p>3 Q. What makes her letter to the</p> <p>4 editor a credible source of evidence about</p> <p>5 Black and Latino voter preferences?</p> <p>6 A. This is part of an overall</p> <p>7 search of articles concerning the 2013</p> <p>8 contest. This was a -- I believe this was</p> <p>9 an article that was suggested by counsel as</p> <p>10 one I should at least look at.</p> <p>11 Q. Did counsel tell you to rely on</p> <p>12 it?</p> <p>13 A. No. It's up to me to rely on</p> <p>14 it.</p> <p>15 Q. So why did you find it to be a</p> <p>16 reliable source of evidence about Black and</p> <p>17 Latino voter preferences in the 2013</p> <p>18 election?</p> <p>19 A. I had no reason not to consider</p> <p>20 her a reliable source. This is a letter to</p> <p>21 the editor that the Rockland Times felt that</p> <p>22 it could -- that it could publish in and</p> <p>23 around the election.</p> <p>24 Q. So letters to the editor to the</p> <p>25 Rockland County Times are a source of</p>	<p style="text-align: right;">Page 121</p> <p>1 Cole</p> <p>2 ones is that they're just evidence of two</p> <p>3 separate slates, two separates groups of</p> <p>4 candidates. This is not information that is</p> <p>5 in isolation. You'll see similar kinds of</p> <p>6 reports from other community members. So</p> <p>7 this was...</p> <p>8 Q. So how does this evidence, the</p> <p>9 letter to the editor from Ms. Hatton and</p> <p>10 another letter to the editor from</p> <p>11 Mr. Weissmandl, how does that contribute to</p> <p>12 your conclusion that the supplemental</p> <p>13 evidence outweighs your EI estimate for the</p> <p>14 2013 board contests, for EI estimates?</p> <p>15 (Record read.)</p> <p>16 A. Those are your words. I didn't</p> <p>17 say they outweigh.</p> <p>18 Q. Actually, that's not true. In</p> <p>19 paragraph 9 in the last sentence you said,</p> <p>20 "In 2013 all six candidates were people of</p> <p>21 color, but the weight of evidence indicates</p> <p>22 that the winning candidates, who were</p> <p>23 endorsed by the private school slate and the</p> <p>24 preferred candidates of White voters, were</p> <p>25 not minority preferred candidates." Those</p>

<p style="text-align: right;">Page 122</p> <p>1 Cole</p> <p>2 are your words.</p> <p>3 A. Where are you reading?</p> <p>4 Q. Paragraph 9, the last sentence.</p> <p>5 A. Paragraph 9.</p> <p>6 MR. GROSSMAN: It's on page 3.</p> <p>7 A. I wrote, "In 2013 all six</p> <p>8 candidates were people of color, but the</p> <p>9 weight of evidence indicates that the</p> <p>10 winning candidates, who were endorsed by the</p> <p>11 private school and preferred candidates of</p> <p>12 White voters, were not minority preferred</p> <p>13 candidates."</p> <p>14 That does not say that the</p> <p>15 supplement evidence outweighs EI.</p> <p>16 Q. What is the weight of evidence</p> <p>17 that you refer to in paragraph 9?</p> <p>18 A. Correlational evidence,</p> <p>19 homogenous precinct analysis, evidence and</p> <p>20 supplemental evidence.</p> <p>21 Q. Okay. So how does the</p> <p>22 supplemental evidence that we just discussed</p> <p>23 involving a letter from Ms. Hatton, a letter</p> <p>24 from Mr. Weissmandl contribute to your</p> <p>25 conclusion that the weight of evidence is</p>	<p style="text-align: right;">Page 124</p> <p>1 Cole</p> <p>2 Q. Is that right?</p> <p>3 A. Could you repeat the question?</p> <p>4 Q. Yes.</p> <p>5 The results of your correlation</p> <p>6 analysis for the Black vote in 2013 and the</p> <p>7 estimate that you generated for Black vote</p> <p>8 in 2013 are not mutually exclusive; is that</p> <p>9 right?</p> <p>10 A. You're going to have to explain</p> <p>11 what you mean by "mutually exclusive."</p> <p>12 Q. What I mean is that your EI</p> <p>13 analysis can be reliable and your</p> <p>14 correlation analysis also can be reliable,</p> <p>15 they're not exclusive.</p> <p>16 A. It's possible that they're both</p> <p>17 reliable, yes.</p> <p>18 Q. Okay. And the supplemental</p> <p>19 evidence that you're relying on consists of</p> <p>20 your decision to credit Ms. Hatton's</p> <p>21 observations about Black and Latino voter</p> <p>22 preferences and another factor, which we</p> <p>23 have not discussed yet, publicized</p> <p>24 endorsements of Save Our Schools and SERTA.</p> <p>25 Why are the publicized</p>
<p style="text-align: right;">Page 123</p> <p>1 Cole</p> <p>2 against your EI estimate?</p> <p>3 A. The racially polarized voting</p> <p>4 estimates from 2015 and 2017 indicate</p> <p>5 racially polarized voting, a divided</p> <p>6 electorate, correlational evidence suggests</p> <p>7 that as the percentage increase, for</p> <p>8 example, of Blacks in precincts increases,</p> <p>9 the support for particular candidates</p> <p>10 increase. The Black preferred candidates</p> <p>11 and Latino preferred candidates were</p> <p>12 supported by public school advocates and</p> <p>13 they invariably lost. That's how I believe</p> <p>14 this kind of supplemental information can</p> <p>15 provide factual context to the quantitative</p> <p>16 information.</p> <p>17 Q. So as I understand it, you</p> <p>18 testified before, that your correlation</p> <p>19 analysis for 2013, particularly with respect</p> <p>20 to the Black vote, can be reliable and also</p> <p>21 your EI estimate for 2013 for the Black vote</p> <p>22 can be reliable, right, they're not</p> <p>23 necessarily mutually exclusive; is that</p> <p>24 right?</p> <p>25 MR. GROSSMAN: Objection.</p>	<p style="text-align: right;">Page 125</p> <p>1 Cole</p> <p>2 endorsements of Save Our Schools and SERTA</p> <p>3 so significant in terms of supplemental</p> <p>4 evidence?</p> <p>5 A. Where are you reading from?</p> <p>6 Q. Paragraph 69, page 31.</p> <p>7 A. These sources cited in 69 --</p> <p>8 1969 (sic) are further examples of community</p> <p>9 support for one slate or another, and the --</p> <p>10 once again, the public school sided</p> <p>11 endorsements invariably are connected with</p> <p>12 candidates who run together, who have been</p> <p>13 preferred candidates, 2015 to '17, who</p> <p>14 always lose, and the opposite is true of the</p> <p>15 private schools.</p> <p>16 Q. Just so I understand, Save Our</p> <p>17 Schools and SERTA as organizations, they're</p> <p>18 political organizations, not racial</p> <p>19 organizations, right?</p> <p>20 A. Correct.</p> <p>21 Q. So doesn't that mean that you're</p> <p>22 conflating endorsements by political</p> <p>23 organizations with support of racial groups?</p> <p>24 A. The issue at hand in these kinds</p> <p>25 of analyses is the preferred candidate. The</p>

<p style="text-align: right;">Page 126</p> <p>1 Cole</p> <p>2 candidate does not necessarily have to be of</p> <p>3 a particular race or not. It is the</p> <p>4 preferred candidate of a racial group.</p> <p>5 Q. Right.</p> <p>6 What I'm asking is why do you</p> <p>7 think that an endorsement of an organization</p> <p>8 called Save Our Schools tells you anything</p> <p>9 about Black voter preference in East Ramapo?</p> <p>10 A. The consistency between those</p> <p>11 preferences as outlined in the supplemental</p> <p>12 evidence and Black support and Hispanic</p> <p>13 support for public school agendas to me is</p> <p>14 consistent and provides a factual context, a</p> <p>15 factual underpinning.</p> <p>16 Q. Right. It's consistent with</p> <p>17 people who are endorsed by Save Our Schools</p> <p>18 losing elections.</p> <p>19 What I want to know is: Why are</p> <p>20 you drawing a connection between that and</p> <p>21 Black voter preferences?</p> <p>22 A. The connection is they're</p> <p>23 supporting a slate of candidates running</p> <p>24 together who are not successful, who haven't</p> <p>25 been successful.</p>	<p style="text-align: right;">Page 128</p> <p>1 Cole</p> <p>2 A. It's evidence of a divided</p> <p>3 community.</p> <p>4 Q. What if Black people don't like</p> <p>5 Save Our Schools organization?</p> <p>6 A. That's fine.</p> <p>7 Q. How would you know one way or</p> <p>8 the other?</p> <p>9 A. I don't.</p> <p>10 Q. Why would that be useful</p> <p>11 evidence?</p> <p>12 A. This is -- you connect public</p> <p>13 schools that are virtually all non-White.</p> <p>14 Q. Do they vote?</p> <p>15 A. Do the schools vote?</p> <p>16 Q. Yes. Do the public school</p> <p>17 students vote?</p> <p>18 A. Of course not.</p> <p>19 Q. Then that doesn't really answer</p> <p>20 my question about Black voter preference and</p> <p>21 its relationship with Save Our Schools.</p> <p>22 A. The question is are candidates</p> <p>23 of choice of Blacks and Hispanic defeated by</p> <p>24 White voters voting as a bloc usually.</p> <p>25 Q. Let me ask you one final</p>
<p style="text-align: right;">Page 127</p> <p>1 Cole</p> <p>2 Q. Right. But the Voting Rights</p> <p>3 Act doesn't protect Save Our Schools</p> <p>4 candidates from losing elections. I'm</p> <p>5 trying to understand why Save Our Schools</p> <p>6 endorsement is something that you regard as</p> <p>7 evidence of Black voter preferences?</p> <p>8 A. The racially polarized voting,</p> <p>9 the quantitative results can provide -- I'm</p> <p>10 sorry, the supplemental evidence can provide</p> <p>11 a context to assess the factual consistency</p> <p>12 of the racial bloc voting estimates. The</p> <p>13 fact that we've got public schools that are</p> <p>14 virtually all non-White, the fact that we</p> <p>15 have organizations supporting the public</p> <p>16 schools, regardless of the race of the</p> <p>17 people in these organizations --</p> <p>18 Q. Well, I'm sorry to interrupt</p> <p>19 you, but that's what I'm getting at, right?</p> <p>20 Save Our Schools is not an organization that</p> <p>21 is limited to any racial category. So why</p> <p>22 is the endorsement of Save Our Schools</p> <p>23 something that you considered to be</p> <p>24 supplemental evidence that is relevant to</p> <p>25 Black voter preference?</p>	<p style="text-align: right;">Page 129</p> <p>1 Cole</p> <p>2 question about 2013. Turning back to page</p> <p>3 40, at the bottom of the page, if I were to</p> <p>4 assume --</p> <p>5 A. Where are we reading?</p> <p>6 Q. Bottom of page 40, back to the</p> <p>7 2013 results.</p> <p>8 If we assume that the EI</p> <p>9 estimate that you calculated for 2013 is</p> <p>10 reliable and we set aside the supplement</p> <p>11 evidence and the correlation analysis and we</p> <p>12 just rely on the EI analysis, it would show</p> <p>13 that MaraLuz Corado, Pierre Germain and</p> <p>14 Bernard Charles were the Black preferred</p> <p>15 candidates in 2013, correct?</p> <p>16 A. That's correct.</p> <p>17 Q. And it would also show that the</p> <p>18 MaraLuz Corado and Pierre Germain and</p> <p>19 Bernard Charles were the White preferred</p> <p>20 candidates in 2013, correct?</p> <p>21 A. Correct.</p> <p>22 Q. And so the 2013 election would</p> <p>23 not be racially polarized if we assume the</p> <p>24 EI is correct; is that right?</p> <p>25 A. If we assumed -- if we're only</p>

<p style="text-align: right;">Page 130</p> <p>1 Cole</p> <p>2 looking at the EI evidence by itself, it's</p> <p>3 polarized with respect to Latinos and Whites</p> <p>4 and not between Blacks and Whites.</p> <p>5 Q. Also it would be polarized</p> <p>6 between Blacks and Latinos, wouldn't it?</p> <p>7 A. It would.</p> <p>8 Q. Turn to page 39, the May 19,</p> <p>9 2015 election at the bottom of the page. I</p> <p>10 would like to ask you some questions about</p> <p>11 these EI results.</p> <p>12 Take a look at the race for the</p> <p>13 seat of Jacob Lefkowitz. This is a</p> <p>14 three-way head-to-head race between or among</p> <p>15 Jacob Lefkowitz, Sabrina Charles Pierre and</p> <p>16 Alan Keith Jones, correct?</p> <p>17 A. Correct.</p> <p>18 Q. Looking at the "Percentage of</p> <p>19 Latino Voters Voting for Candidate, EI"</p> <p>20 column, you calculated an estimate of 0.7</p> <p>21 percent for the percentage of Latino voters</p> <p>22 who voted for Jacob Lefkowitz, correct?</p> <p>23 A. Correct.</p> <p>24 Q. You calculated 64.2 percent of</p> <p>25 the Latino voters who voted for Sabrina</p>	<p style="text-align: right;">Page 132</p> <p>1 Cole</p> <p>2 get the remainder?</p> <p>3 A. Not necessarily.</p> <p>4 Q. Why not?</p> <p>5 A. These results are generated</p> <p>6 independently. This is not like a</p> <p>7 regression where you could subtract a result</p> <p>8 from one and that would be your estimate.</p> <p>9 Given the way that King is devised, these</p> <p>10 numbers don't necessarily add up to 100</p> <p>11 percent. The Jones estimate is based on 468</p> <p>12 votes; whereas, Charles Pierre is based on</p> <p>13 4,600 votes, and Lefkowitz 3,000 -- 6,380.</p> <p>14 Q. So if you were to take Alan</p> <p>15 Keith Jones out of the equation because</p> <p>16 you're independently evaluating them, how</p> <p>17 can it be that Sabrina Charles Pierre got</p> <p>18 64.2 percent of the vote and Jacob Lefkowitz</p> <p>19 got 0.7 percent of the vote; aren't we</p> <p>20 missing a fairly large percent of the vote</p> <p>21 in that estimate?</p> <p>22 A. These percentages are</p> <p>23 percentages of Latino voters.</p> <p>24 Q. Right.</p> <p>25 What happened to the other</p>
<p style="text-align: right;">Page 131</p> <p>1 Cole</p> <p>2 Charles Pierre, correct?</p> <p>3 A. Correct.</p> <p>4 Q. For Alan Keith Jones there is an</p> <p>5 asterisk. At the bottom of the page the</p> <p>6 asterisk says, "Indeterminate." What does</p> <p>7 that mean?</p> <p>8 A. It means if the EI program</p> <p>9 doesn't have enough information to calculate</p> <p>10 an estimate, it won't, and that's what</p> <p>11 happened here.</p> <p>12 Q. Why would it not have enough</p> <p>13 information?</p> <p>14 A. Jones only got 468 votes.</p> <p>15 That's why.</p> <p>16 Q. So a low amount of votes is</p> <p>17 significant to the EI analysis?</p> <p>18 A. Well, if the algorithms can't --</p> <p>19 in general, indeterminate votes are likely</p> <p>20 with smaller number of vote totals.</p> <p>21 Q. How could it be that you were</p> <p>22 able to calculate Sabrina Charles Pierre</p> <p>23 received 64.2 percent, Jacob Lefkowitz got</p> <p>24 .7 percent and then not be able to determine</p> <p>25 what Alan Keith Jones got; wouldn't he just</p>	<p style="text-align: right;">Page 133</p> <p>1 Cole</p> <p>2 30-something percent?</p> <p>3 A. We don't know because EI wasn't</p> <p>4 able to generate an estimate given the small</p> <p>5 number of votes that Jones got.</p> <p>6 Q. Well, but there were a large</p> <p>7 number of votes for Jacob Lefkowitz, right?</p> <p>8 A. Based on 6,380 votes.</p> <p>9 Q. And there were a large number of</p> <p>10 votes for Sabrina Charles Pierre, right?</p> <p>11 A. 4,600.</p> <p>12 Q. Are you confident in your</p> <p>13 estimate of 64.2 percent of the Latino vote</p> <p>14 for Sabrina Charles Pierre?</p> <p>15 A. I am.</p> <p>16 Q. Are you confident in your</p> <p>17 estimate of 0.7 percent of the Latino vote</p> <p>18 for Jacob Lefkowitz?</p> <p>19 A. I am.</p> <p>20 Q. How can you be confident in</p> <p>21 those estimates if you can't say what</p> <p>22 happened to the other 30 percent of the</p> <p>23 Latino voters?</p> <p>24 A. Because the vote -- the analysis</p> <p>25 for Lefkowitz was done independently of what</p>

<p style="text-align: right;">Page 134</p> <p>1 Cole</p> <p>2 Jones got.</p> <p>3 Q. Are you saying that you can get</p> <p>4 reliable EI estimates for a two-way race</p> <p>5 where you're not getting -- you wouldn't</p> <p>6 have the percentages add up to a hundred</p> <p>7 percent?</p> <p>8 MR. GROSSMAN: Objection.</p> <p>9 A. I already explained that.</p> <p>10 Q. Well, I can understand how you</p> <p>11 could get a little bit over a hundred</p> <p>12 percent or a little below a hundred percent.</p> <p>13 I don't understand how it could be reliable</p> <p>14 to say that 64.2 percent of Latino voters</p> <p>15 voted for one candidate, .7 percent of</p> <p>16 Latino candidates voted for another</p> <p>17 candidate; what happened to the rest of</p> <p>18 them? Don't you want to know?</p> <p>19 A. I'd like to know, but there was</p> <p>20 insufficient data for EI to produce an</p> <p>21 estimate.</p> <p>22 Q. Did you calculate confidence</p> <p>23 intervals for your estimates for the percent</p> <p>24 of Latino voters voting for the candidates</p> <p>25 in 2015?</p>	<p style="text-align: right;">Page 136</p> <p>1 Cole</p> <p>2 A. Correct.</p> <p>3 Q. Are you confident in that</p> <p>4 estimate?</p> <p>5 A. I am.</p> <p>6 Q. You also generated an estimate</p> <p>7 that 3.6 percent of Black voters voted for</p> <p>8 Alan Keith Jones, right?</p> <p>9 A. Yes.</p> <p>10 Q. Are you confident in that</p> <p>11 estimate?</p> <p>12 A. I am.</p> <p>13 Q. Why were you able to generate an</p> <p>14 estimate among Black voters for Alan Keith</p> <p>15 Jones, but not for Latino voters?</p> <p>16 A. Because there are more Black</p> <p>17 voters than Latino voters.</p> <p>18 Q. When you say 3.6 percent of</p> <p>19 Black voters for Alan Keith Jones, 3.6</p> <p>20 percent of what number?</p> <p>21 A. Of Black voters.</p> <p>22 Q. Right.</p> <p>23 What I mean is: Do you know how</p> <p>24 many Black voters voted in the 2015</p> <p>25 election?</p>
<p style="text-align: right;">Page 135</p> <p>1 Cole</p> <p>2 A. We've already gone over whether</p> <p>3 or not I generated confidence intervals.</p> <p>4 Q. So you did not generate</p> <p>5 confidence intervals for your estimates for</p> <p>6 the percent of Latino voters voting for</p> <p>7 candidate in 2015, correct?</p> <p>8 A. I generated standard errors.</p> <p>9 Q. Right.</p> <p>10 But not confidence intervals,</p> <p>11 right?</p> <p>12 A. I did not produce confidence</p> <p>13 intervals, that's right.</p> <p>14 Q. Let's move to the next column</p> <p>15 over, sticking with the seat of Jacob</p> <p>16 Lefkowitz, you generated an estimate that</p> <p>17 36.2 percent of Black voters voted for Jacob</p> <p>18 Lefkowitz, correct?</p> <p>19 A. Correct.</p> <p>20 Q. Are you confident in that</p> <p>21 estimate?</p> <p>22 A. Yes.</p> <p>23 Q. And you generated an estimate</p> <p>24 that 74.6 percent of Black voters voted for</p> <p>25 Sabrina Charles Pierre, correct?</p>	<p style="text-align: right;">Page 137</p> <p>1 Cole</p> <p>2 A. I know how many Blacks of</p> <p>3 citizen voting age population there are.</p> <p>4 And that's what is used as the predictor.</p> <p>5 Q. So you don't actually know how</p> <p>6 many Black voters voted in the 2015</p> <p>7 election, right?</p> <p>8 A. Not actually how many voted.</p> <p>9 Q. Is there a way for you to</p> <p>10 estimate how many Black voters actually</p> <p>11 voted in this election?</p> <p>12 A. You could generate turnout</p> <p>13 estimates to help you do that.</p> <p>14 Q. Did you generate turnout</p> <p>15 estimates for the 2015 election?</p> <p>16 A. They have been generated, yes.</p> <p>17 Q. Who generated them?</p> <p>18 A. I did.</p> <p>19 Q. Do you report them in your</p> <p>20 report?</p> <p>21 A. No.</p> <p>22 Q. Why not?</p> <p>23 A. We've gone through this same set</p> <p>24 of questions this morning.</p> <p>25 Q. For the 2013 election, that's</p>

<p style="text-align: right;">Page 138</p> <p>1 Cole</p> <p>2 correct.</p> <p>3 A. The methodology is the same.</p> <p>4 Q. So is it fair to say that</p> <p>5 everything you did methodologically for 2013</p> <p>6 election, you also did for the 2015</p> <p>7 election?</p> <p>8 A. Yes.</p> <p>9 Q. So for the 2015 election you did</p> <p>10 not generate any confidence intervals,</p> <p>11 correct?</p> <p>12 A. Correct.</p> <p>13 Q. You did not report any turnout</p> <p>14 estimate for the 2015 election, correct?</p> <p>15 A. That's right.</p> <p>16 Q. But you have a turnout estimate</p> <p>17 for the 2015 election?</p> <p>18 A. Yes.</p> <p>19 Q. Is the turnout estimate relevant</p> <p>20 to your conclusions in your report?</p> <p>21 A. The main questions relate to</p> <p>22 cohesion and crossover voting. Turnout</p> <p>23 estimates were not a main focus of the</p> <p>24 report. I was not the -- in general, my</p> <p>25 conclusions would not change given turnout</p>	<p style="text-align: right;">Page 140</p> <p>1 Cole</p> <p>2 A. Not necessarily irrelevant, but</p> <p>3 they did not influence my conclusion.</p> <p>4 Q. Why did you generate a turnout</p> <p>5 estimate?</p> <p>6 A. They're part -- they're standard</p> <p>7 output from the King's EI program.</p> <p>8 Q. And you, I believe, testified</p> <p>9 before, but just in case I missed it, and</p> <p>10 you have retained that standard output from</p> <p>11 the ecological inference?</p> <p>12 A. I have.</p> <p>13 Q. As you sit here today, do you</p> <p>14 recall anything about that turnout estimate?</p> <p>15 MR. GROSSMAN: Objection.</p> <p>16 Q. Meaning if I was to ask you your</p> <p>17 best recollection of what the Black turnout</p> <p>18 was in 2015, would you recall anything about</p> <p>19 your turnout estimate?</p> <p>20 A. I don't recall the specific</p> <p>21 estimates.</p> <p>22 Q. What do you recall?</p> <p>23 A. I recall that in general, in</p> <p>24 general Whites turned out at higher rates</p> <p>25 than Blacks and Latino. That's what I</p>
<p style="text-align: right;">Page 139</p> <p>1 Cole</p> <p>2 data.</p> <p>3 Q. Is your turnout estimates -- or</p> <p>4 rather, are your turnout estimates relevant</p> <p>5 to your conclusions in your report in any</p> <p>6 way?</p> <p>7 A. My conclusions about racially</p> <p>8 polarized voting were made without respect</p> <p>9 to turnout estimates.</p> <p>10 Q. That's one of the conclusions in</p> <p>11 your report. What about the others? Are</p> <p>12 your turnout estimates relevant to any of</p> <p>13 the conclusions in your report?</p> <p>14 A. There were three main questions.</p> <p>15 The answer would be the same for all three;</p> <p>16 racially polarized voting, Black cohesion,</p> <p>17 Black and Latino cohesion and whether</p> <p>18 candidates of choice of Blacks -- Blacks or</p> <p>19 Blacks and Latinos are usually defeated by</p> <p>20 White voters as a bloc.</p> <p>21 Q. Have you shared turnout analysis</p> <p>22 and estimates with anyone?</p> <p>23 A. I don't think so.</p> <p>24 Q. Are you saying that turnout</p> <p>25 estimates are irrelevant to your report?</p>	<p style="text-align: right;">Page 141</p> <p>1 Cole</p> <p>2 recall.</p> <p>3 Q. A lot higher?</p> <p>4 A. I don't recall.</p> <p>5 Q. Ballpark?</p> <p>6 A. No ballpark.</p> <p>7 Q. Was Black turnout low?</p> <p>8 A. I just answered that. I</p> <p>9 remember that Whites tended to vote at a</p> <p>10 higher rate, participated at a higher rate</p> <p>11 than the other two racial categories.</p> <p>12 MR. GROSSMAN: This is probably</p> <p>13 a good time for a break. We have been</p> <p>14 going for about an hour.</p> <p>15 MR. LEVINE: For an hour?</p> <p>16 MR. GROSSMAN: Yes.</p> <p>17 MR. LEVINE: Yes, of course.</p> <p>18 (Recess taken.)</p> <p>19 Q. We're looking at the 2015</p> <p>20 elections. Before we turn back to that, let</p> <p>21 me direct your attention to page 6 of your</p> <p>22 report. Take a look at Footnote 9, and I'll</p> <p>23 read it so everybody can follow along. I'm</p> <p>24 starting after the citation. It reads, "A</p> <p>25 Black preferred candidate in a head-to-head</p>

<p style="text-align: right;">Page 142</p> <p>1 Cole</p> <p>2 contest with two candidates is the candidate</p> <p>3 who receives a majority of the Black votes.</p> <p>4 Determination of Black preferred candidates</p> <p>5 in head-to-head contests with more than two</p> <p>6 candidates needs to be established on an</p> <p>7 election-specific data basis, yet the level</p> <p>8 of support for a candidate can change given</p> <p>9 the total number of candidates; although</p> <p>10 receiving a majority of Black votes in</p> <p>11 contest with more than two candidates is not</p> <p>12 required for determination as a Black</p> <p>13 preferred candidate, receiving a majority of</p> <p>14 Black votes would be an indication of</p> <p>15 substantial support from Black voters."</p> <p>16 What do you mean that "receiving</p> <p>17 a majority of Black votes in contests with</p> <p>18 more than two candidate is not required for</p> <p>19 determination as a Black preferred</p> <p>20 candidate"?</p> <p>21 A. I'll give you an example. Let's</p> <p>22 say we have ten candidates and candidate --</p> <p>23 the one with the highest vote got 40 percent</p> <p>24 of the vote. Everybody else got five, four,</p> <p>25 small amounts of percentage of votes.</p>	<p style="text-align: right;">Page 144</p> <p>1 Cole</p> <p>2 percent of Latino voters voted for Natasha</p> <p>3 Morales, correct?</p> <p>4 A. Correct.</p> <p>5 Q. Are you confident in those</p> <p>6 estimates?</p> <p>7 A. I am.</p> <p>8 Q. The next column you estimated</p> <p>9 that 40 percent of Black voters voted for</p> <p>10 Yonah Rothman, correct?</p> <p>11 A. Correct.</p> <p>12 Q. And you estimated that 59.9</p> <p>13 percent of Black voters voted for Natasha</p> <p>14 Morales, correct?</p> <p>15 A. Correct.</p> <p>16 Q. Looking at the White voter</p> <p>17 column, you estimated that 72.1 percent of</p> <p>18 White voters voted for Yonah Rothman,</p> <p>19 correct?</p> <p>20 A. Correct.</p> <p>21 Q. And you estimated that 28.1</p> <p>22 percent of White voters voted for Natasha</p> <p>23 Morales, correct?</p> <p>24 A. Correct.</p> <p>25 Q. Are you confident in those</p>
<p style="text-align: right;">Page 143</p> <p>1 Cole</p> <p>2 On a case-by-case basis, you</p> <p>3 might conclude that the candidate with the</p> <p>4 40 percent was the preferred candidate, not</p> <p>5 necessarily requiring majority, if you've</p> <p>6 got more than two candidates. That's what I</p> <p>7 mean by that.</p> <p>8 Q. Do you have to change the way</p> <p>9 you do an ecological inference analysis to</p> <p>10 account for that possibility where you have</p> <p>11 three-way elections?</p> <p>12 A. Each candidate is analyzed</p> <p>13 separately.</p> <p>14 Q. So in the three-way elections in</p> <p>15 2015, nothing about the way you performed</p> <p>16 the ecological inference analysis changes?</p> <p>17 A. No.</p> <p>18 Q. Let's look at the seat of Yonah</p> <p>19 Rothman, page 39, bottom of the page. For</p> <p>20 the seat of Yonah Rothman, you estimated</p> <p>21 that 0.5 percent of Latino voters voting for</p> <p>22 the candidate -- only 0.5 percent of Latino</p> <p>23 voters voted for Yonah Rothman, correct?</p> <p>24 A. Correct.</p> <p>25 Q. And you estimated that 99.4</p>	<p style="text-align: right;">Page 145</p> <p>1 Cole</p> <p>2 estimates?</p> <p>3 A. I am.</p> <p>4 Q. Because these are point</p> <p>5 estimates, is it possible that the actual</p> <p>6 support of Black voters for Yonah Rothman</p> <p>7 could have been higher than 40 percent?</p> <p>8 A. It's possible.</p> <p>9 Q. Is it possible that the actual</p> <p>10 support of Black voters for Natasha Morales</p> <p>11 could have been lower than 59.9 percent?</p> <p>12 A. It's possible.</p> <p>13 Q. How likely is it?</p> <p>14 A. Given the standard errors that</p> <p>15 were generated with these analyses, I found</p> <p>16 it to be not likely.</p> <p>17 Q. Let's look at the seat of Eliahu</p> <p>18 Solomon, the next one. Here we have another</p> <p>19 three-way race. You calculated that the</p> <p>20 percentage of Latino voters voting for</p> <p>21 candidate Juan Pablo Ramirez was 0.3</p> <p>22 percent; is that correct?</p> <p>23 A. Correct.</p> <p>24 Q. Are you confident in that</p> <p>25 estimate?</p>

<p style="text-align: right;">Page 146</p> <p>1 Cole</p> <p>2 A. I am.</p> <p>3 Q. You estimated that 99.4 percent</p> <p>4 of Latino voters voted for Steve White,</p> <p>5 correct?</p> <p>6 A. Correct.</p> <p>7 Q. Are you confident in that</p> <p>8 estimate?</p> <p>9 A. I am.</p> <p>10 Q. And you have a candidate named</p> <p>11 Yisroel Eisenbach for whom the Latino voter</p> <p>12 support is indeterminate. Is that for the</p> <p>13 same reason that you determined the Alan</p> <p>14 Keith Jones Latino support was</p> <p>15 indeterminate?</p> <p>16 A. Yes.</p> <p>17 Q. Does that indeterminate estimate</p> <p>18 in any way affect the reliability of your</p> <p>19 estimates for the other two candidates?</p> <p>20 A. No.</p> <p>21 Q. Does it strike you as</p> <p>22 interesting that no or virtually no Latino</p> <p>23 voters voted for Juan Pablo Ramirez and all</p> <p>24 or nearly all Latino voters voted for Steve</p> <p>25 White?</p>	<p style="text-align: right;">Page 148</p> <p>1 Cole</p> <p>2 polarization?</p> <p>3 A. The racial polarization would</p> <p>4 still be whatever the preferred candidate is</p> <p>5 of the particular racial group. I'm just</p> <p>6 saying that in the situation where there are</p> <p>7 multiple races, you have a different dynamic</p> <p>8 than you would if there weren't multiple</p> <p>9 races as the candidates.</p> <p>10 Q. In the 2015 elections, looking</p> <p>11 at the White voter column, you estimated</p> <p>12 that 68 percent of White voters voted for</p> <p>13 Juan Pablo Ramirez, correct?</p> <p>14 A. Correct.</p> <p>15 Q. Are you confident in that</p> <p>16 estimate?</p> <p>17 A. I am.</p> <p>18 Q. And 25.2 percent of White voters</p> <p>19 voted for Steve White; are you confident in</p> <p>20 that estimate?</p> <p>21 A. Yes.</p> <p>22 Q. And 6 percent of White voters</p> <p>23 voted for Yisroel Eisenbach; are you</p> <p>24 confident in that estimate?</p> <p>25 A. I am.</p>
<p style="text-align: right;">Page 147</p> <p>1 Cole</p> <p>2 A. White was the candidate of</p> <p>3 choice in the Latinos. It does not</p> <p>4 necessarily have to be the same race as the</p> <p>5 voters.</p> <p>6 Q. Do you consider the race of the</p> <p>7 candidate at all as a factor in your</p> <p>8 conclusion when you determine whether or not</p> <p>9 there is racial polarization?</p> <p>10 A. I tend to find the interracial</p> <p>11 contest to be more probative than a race</p> <p>12 that is not interracial. It gives the</p> <p>13 voters a choice, a racial choice.</p> <p>14 Q. What do you mean by that, by "a</p> <p>15 racial choice"?</p> <p>16 A. Meaning that a contest between</p> <p>17 two Blacks and two Whites would not have a</p> <p>18 racial choice; whereas, a contest between a</p> <p>19 Black and White candidate, there is a racial</p> <p>20 choice.</p> <p>21 Q. In an interracial contest, are</p> <p>22 you saying a White candidate receiving</p> <p>23 support of White voters and a Black</p> <p>24 candidate receiving the support of Black</p> <p>25 voters would be indicative of racial</p>	<p style="text-align: right;">Page 149</p> <p>1 Cole</p> <p>2 Q. Is it still relevant to your</p> <p>3 analysis, because it's an interracial</p> <p>4 contest, even if a majority of White voters</p> <p>5 supported the Latino candidate and a</p> <p>6 majority of Latino voters supported the</p> <p>7 White candidate?</p> <p>8 A. It's still racially polarized</p> <p>9 voting. The preferred candidate of --</p> <p>10 regardless of the race of the candidate, the</p> <p>11 preferred candidate of Latinos and Blacks</p> <p>12 lost.</p> <p>13 The cases -- the data that were</p> <p>14 decided in Gingles were all cross-racial</p> <p>15 cases. Over time analysts began also</p> <p>16 analyzing White-White contests. So as I</p> <p>17 said in the report, the preference for</p> <p>18 elections to rely upon would be recent</p> <p>19 indigenous contests that are interracial,</p> <p>20 but the White-White can also inform about</p> <p>21 racially polarized voting and Black-Black</p> <p>22 and so on.</p> <p>23 Q. Right.</p> <p>24 So if interracial races are more</p> <p>25 probative because they provide voters of</p>

Page 150

1 Cole

2 more racial choice, as you say, isn't it

3 probative when you have a race where White

4 voters overwhelming vote for a Latino

5 candidate and Latino voters overwhelming

6 vote for a White candidate?

7 A. I mean, it's an interesting

8 finding.

9 Q. Have you ever seen that in an

10 election before?

11 A. I've seen situations where White

12 preferred -- this similar pattern, yes.

13 Q. Even though voters are voting

14 for a candidate who is not of their own race

15 instead of voters voting for a candidate who

16 is of their own race, even though it's a

17 reversal, your opinion is that this race is

18 still indicative of racial polarization?

19 A. Yes.

20 Q. If that's right, why would

21 interracial contests be more probative than

22 same race contests?

23 A. In a contest involving just

24 Whites, for example, the whole outcome is --

25 you know, is mitigated by the fact that

Page 151

1 Cole

2 there is no racial choice. It's just a

3 different dynamic.

4 Q. But here there is a racial

5 choice, right?

6 A. The point is is that it's the

7 candidate of choice of the voters. That's

8 the real outcome you're looking at.

9 Q. That's interesting. Because

10 then that suggests that the candidate of

11 choice of the Latino voters is the candidate

12 of choice, not because of the race of the

13 candidate, but because of something else,

14 right?

15 A. It would indicate that they

16 are -- sure. Probably other factors, of

17 course.

18 Q. Let's take a look at 2016, the

19 top of the same page, page 39. The seat of

20 Bernard Charles, you calculated that the

21 percentage of Latino voters voting for

22 candidate Bernard Charles was 1.2 percent,

23 correct?

24 A. Correct.

25 Q. And you calculated the percent

Page 152

1 Cole

2 of Latino voters who voted for Kim Foskew

3 was 99.1 percent, correct?

4 A. Correct.

5 Q. And you calculated in the next

6 column that the percentage of Black voters

7 who voted for Bernard Charles was 1.4

8 percent, correct?

9 A. Correct.

10 Q. And you calculated that the

11 percentage of Black voters who voted for Kim

12 Foskew was 99.6 percent, correct?

13 A. Correct.

14 Q. Are you confident in all of

15 those estimates?

16 A. I am.

17 Q. You also calculated that the

18 percentage of White voters who supported

19 Bernard Charles was 77.2 percent, correct?

20 A. Correct.

21 Q. And that 23 percent of White

22 voters supported Kim Foskew, correct?

23 A. Correct.

24 Q. Bernard Charles is a Black man,

25 correct?

Page 153

1 Cole

2 A. Correct.

3 Q. And Kim Foskew is a White women,

4 correct?

5 A. Yes, yes.

6 Q. We have the same pattern, don't

7 we, where you have majority of White voters

8 who voted for a Black candidate and a

9 majority of Black voters who voted for a

10 White candidate, right?

11 A. Right.

12 Q. And like we just discussed, does

13 that suggest to you that if Kim Foskew is

14 the candidate of choice for Black voters,

15 it's not because of her race?

16 A. We don't know the reason. This

17 is just the result. I don't know if it has

18 to do with the race of the candidate. We

19 just know that Kim Foskew is the candidate

20 of choice of Blacks and Latinos. Don't know

21 the reason for it.

22 Q. And you know that Bernard

23 Charles was the candidate of choice for

24 White voters, correct?

25 A. Correct.

<p style="text-align: right;">Page 154</p> <p>1 Cole</p> <p>2 Q. So let's go down to the next</p> <p>3 election for the seat of Pierre Germain.</p> <p>4 You calculated that 77 percent of White</p> <p>5 voters voted for Pierre Germain, right?</p> <p>6 A. Right.</p> <p>7 Q. Are you confident in that</p> <p>8 result?</p> <p>9 A. I am.</p> <p>10 Q. And 23 percent of White voters</p> <p>11 voted for Jean Fields, right?</p> <p>12 A. Right.</p> <p>13 Q. And Pierre Germain is a Black</p> <p>14 man also, correct?</p> <p>15 A. Yes.</p> <p>16 Q. And Jean Fields is a Black</p> <p>17 woman, right?</p> <p>18 A. Right.</p> <p>19 Q. So that suggests that 77.2</p> <p>20 percent of Whites voted for Bernard Charles,</p> <p>21 also 77 percent of Whites voted for Pierre</p> <p>22 Germain; so that is a consistent amount of</p> <p>23 White support for two Black candidates</p> <p>24 correct?</p> <p>25 A. That's correct. Your analysis</p>	<p style="text-align: right;">Page 156</p> <p>1 Cole</p> <p>2 Q. And 24 percent of White voters</p> <p>3 supporter Natasha Morales, right?</p> <p>4 A. Right.</p> <p>5 Q. And Yehuda Weissmandl is White?</p> <p>6 A. Right.</p> <p>7 Q. So as between the support for</p> <p>8 Bernard Charles, Pierre Germain and Yehuda</p> <p>9 Weissmandl, it's about the same, between 77</p> <p>10 and 78 percent of White voters, correct?</p> <p>11 A. Correct.</p> <p>12 Q. And there is no variation</p> <p>13 according to the race of the candidate, is</p> <p>14 there?</p> <p>15 A. That's correct.</p> <p>16 Q. And that's true for their</p> <p>17 opponents because in each of those</p> <p>18 elections, the first your opponent was White</p> <p>19 woman, the second your opponent was a Black</p> <p>20 woman, and the third the opponent was a</p> <p>21 Latino woman, and the amount of White</p> <p>22 support remained the same across all three</p> <p>23 of those candidates, true, correct?</p> <p>24 A. Correct.</p> <p>25 Q. Doesn't that suggest that if</p>
<p style="text-align: right;">Page 155</p> <p>1 Cole</p> <p>2 excludes the fact that there were two Black</p> <p>3 candidates --</p> <p>4 Q. Right.</p> <p>5 A. -- for the seat of Pierre</p> <p>6 Germain, so Whites had to vote for a Black</p> <p>7 candidate.</p> <p>8 Q. That's a useful point, because</p> <p>9 23 percent of Whites, according your</p> <p>10 estimates, voted for Kim Foscaw, right?</p> <p>11 A. Right.</p> <p>12 Q. 23 percent of White voters voted</p> <p>13 for Jean Fields, right?</p> <p>14 A. Right.</p> <p>15 Q. So even when presented with a</p> <p>16 racial choice, as you put it, the same</p> <p>17 percentages of White voters voted the same</p> <p>18 way as between candidates, right?</p> <p>19 A. Right. And Foscaw and Fields</p> <p>20 and Morales are all -- they all ran together</p> <p>21 on the same slate, public school slate.</p> <p>22 Q. Look at the seat of Yehuda</p> <p>23 Weissmandl, 78 percent of White voters</p> <p>24 supported Yehuda Weissmandl, right?</p> <p>25 A. Right.</p>	<p style="text-align: right;">Page 157</p> <p>1 Cole</p> <p>2 Yehuda Weissmandl is the preferred candidate</p> <p>3 of White voters, it's not because of his</p> <p>4 race?</p> <p>5 A. These results to me suggest that</p> <p>6 the three candidates that ran, who were</p> <p>7 supported by private school interests, were</p> <p>8 supported regardless of their race.</p> <p>9 Q. Great.</p> <p>10 And the three candidates who</p> <p>11 ran, to use your term, with the support of</p> <p>12 the public school community lost without</p> <p>13 regard to their race, right?</p> <p>14 A. That's correct.</p> <p>15 Q. Let's take a look at 2017. For</p> <p>16 the 2017 election, for the sake of</p> <p>17 completeness, as you testified before, you</p> <p>18 did the same thing methodologically for the</p> <p>19 2017 election that you did for all the</p> <p>20 previous, correct?</p> <p>21 A. That's correct.</p> <p>22 Q. And for the 2017 election you</p> <p>23 did not generate confidence intervals,</p> <p>24 correct?</p> <p>25 A. Correct.</p>

<p style="text-align: right;">Page 158</p> <p>1 Cole</p> <p>2 Q. And for the 2017 election you</p> <p>3 did generate turnout estimates, but did not</p> <p>4 report them, correct?</p> <p>5 A. Correct.</p> <p>6 MR. LEVINE: I'm going to mark</p> <p>7 as Cole Exhibit 4 this document.</p> <p>8 (Cole Exhibit 4, Annual Budget</p> <p>9 and Trustee Vote for May 16, 2017</p> <p>10 Official Results, marked for</p> <p>11 identification, as of this date.)</p> <p>12 Q. The exhibit you've just been</p> <p>13 handed marked Cole 4 is a copy of the Annual</p> <p>14 Budget and Trustee Vote for May 16, 2017</p> <p>15 Official Results.</p> <p>16 Have you seen this one before?</p> <p>17 A. Yes.</p> <p>18 Q. I think you know what I'm about</p> <p>19 to ask you, which has to with the far column</p> <p>20 on your table for the votes?</p> <p>21 A. Right.</p> <p>22 Q. And the official results, the</p> <p>23 vote counts in the bottom row, do you see</p> <p>24 those?</p> <p>25 A. I do.</p>	<p style="text-align: right;">Page 160</p> <p>1 Cole</p> <p>2 this election because of the work we've done</p> <p>3 so far.</p> <p>4 Are you confident in your EI</p> <p>5 estimates for each of the estimates that you</p> <p>6 generated for the 2017 election?</p> <p>7 A. I am.</p> <p>8 Q. And you did not consider any</p> <p>9 supplemental evidence or other quantitative</p> <p>10 analysis that caused you to question the</p> <p>11 results that you got for the 2017 election?</p> <p>12 MR. GROSSMAN: Objection.</p> <p>13 Q. Is that right?</p> <p>14 A. Could you repeat the question?</p> <p>15 Q. Yes.</p> <p>16 So none of the supplemental</p> <p>17 evidence or other quantitative analysis that</p> <p>18 you performed caused you to question your</p> <p>19 results for the 2017 election, right?</p> <p>20 A. Yes, the results were all</p> <p>21 consistent.</p> <p>22 Q. Looking at the first row, you</p> <p>23 estimated that 36.5 percent of Black voters</p> <p>24 voted for Mark Berkowitz and 68.8 percent of</p> <p>25 Black voters voted for Alexandra Manigo,</p>
<p style="text-align: right;">Page 159</p> <p>1 Cole</p> <p>2 Q. They don't match up?</p> <p>3 A. That's correct.</p> <p>4 Q. Is that a typo?</p> <p>5 A. They are typos. When I first</p> <p>6 got the 2017 data, I got unofficial results.</p> <p>7 My analyses were run on official results,</p> <p>8 and so that's why these numbers don't match.</p> <p>9 These are the unofficial totals. But the</p> <p>10 analyses were run on the official totals.</p> <p>11 Q. So I'm clear, the analyses that</p> <p>12 you ran to generate your EI estimates of</p> <p>13 racial support for the candidates, you used</p> <p>14 the official results?</p> <p>15 A. That's correct.</p> <p>16 Q. And the report just lists the</p> <p>17 vote totals in error, that is just a typo</p> <p>18 drawn from the unofficial results?</p> <p>19 A. That's correct.</p> <p>20 Q. So we can disregard that column</p> <p>21 and there is no reason to believe that that</p> <p>22 resulted in any error in your estimate?</p> <p>23 A. That's right.</p> <p>24 Q. Very good.</p> <p>25 I think we can maybe short track</p>	<p style="text-align: right;">Page 161</p> <p>1 Cole</p> <p>2 right?</p> <p>3 A. Right.</p> <p>4 Q. And for the seat of Harry</p> <p>5 Grossman below, you estimated that 7.6</p> <p>6 percent of Black voters voted for Harry</p> <p>7 Grossman and 94.2 percent of Black voters</p> <p>8 voted for Eric Goodwin, right?</p> <p>9 A. Right.</p> <p>10 Q. Did it strike you as anomalous</p> <p>11 Mark Berkowitz appeared to do significantly</p> <p>12 better with the Black vote than Harry</p> <p>13 Grossman?</p> <p>14 A. With the seat of Harry Grossman</p> <p>15 you have a relatively high percentage of</p> <p>16 Black voters supporting a Black candidate.</p> <p>17 In a contest that is amongst Whites, a</p> <p>18 smaller percentage of Black voters supported</p> <p>19 Alexandra Manigo, a White, but still</p> <p>20 cohesive. It was more cohesive when there</p> <p>21 was a Black running.</p> <p>22 Q. Do you understand Eric Goodwin</p> <p>23 to be running on a slate endorsed by what</p> <p>24 you've characterized as the public school</p> <p>25 community?</p>

<p style="text-align: right;">Page 162</p> <p>1 Cole</p> <p>2 A. Yes.</p> <p>3 Q. Do you understand Alexandra</p> <p>4 Manigo to be running to have been running on</p> <p>5 the same slate Eric Goodwin?</p> <p>6 A. Yes.</p> <p>7 Q. Why do you think they received</p> <p>8 such disparate levels of support despite</p> <p>9 running on the same slate?</p> <p>10 A. First of all, both percentages</p> <p>11 indicate cohesion and indicative of</p> <p>12 polarized voting. This would just be an</p> <p>13 example where -- potentially a contest where</p> <p>14 there is no Black running, was not related</p> <p>15 to the severe kind of polarization that we</p> <p>16 saw with the seats of Grossman and</p> <p>17 Engel/Chajmovicz.</p> <p>18 Q. Is there something different</p> <p>19 about Mark Berkowitz?</p> <p>20 A. What do you mean by that?</p> <p>21 Q. Well, for example, for the seat</p> <p>22 of Engle you have 99.4 percent of Black</p> <p>23 voters supporting Chevon Dos Reis, who is a</p> <p>24 Latino woman, and 3.4 percent of Black</p> <p>25 voters supporting Joe Freilich. That is</p>	<p style="text-align: right;">Page 164</p> <p>1 Cole</p> <p>2 you generated in which you are not confident</p> <p>3 the percentage of Black voters who voted for</p> <p>4 the candidates in May 21, 2013 election?</p> <p>5 A. It sounds right.</p> <p>6 MR. LEVINE: Why don't we take a</p> <p>7 five-minute break and see if there is</p> <p>8 anything left to do.</p> <p>9 MR. GROSSMAN: Okay.</p> <p>10 MR. LEVINE: Sound good?</p> <p>11 MR. GROSSMAN: Sounds good.</p> <p>12 (Recess taken.)</p> <p>13 Q. Let's go back on the record. I</p> <p>14 only have a few more questions. Thank you</p> <p>15 very much for your patience so far.</p> <p>16 I still have a question that I'm</p> <p>17 not clear of in terms of what you're calling</p> <p>18 the "correlation analysis." If you could</p> <p>19 turn to your report, which is the document</p> <p>20 we marked as Exhibit 2, to page 8, paragraph</p> <p>21 22, the very bottom of the page, that</p> <p>22 paragraph actually extends over on to the</p> <p>23 page 9, and at the top of the page, and in</p> <p>24 the penultimate sentence of that paragraph,</p> <p>25 you list the three methods of analysis that</p>
<p style="text-align: right;">Page 163</p> <p>1 Cole</p> <p>2 also a very different vote breakdown as</p> <p>3 between Mark Berkowitz and Alexandra Manigo</p> <p>4 despite the fact that all three are slate</p> <p>5 candidates, right?</p> <p>6 A. Right.</p> <p>7 Q. So I'm just wondering if that</p> <p>8 strikes you as anomalous?</p> <p>9 A. His pattern was -- yes, it was</p> <p>10 somewhat different, let's say, than 2016 and</p> <p>11 one possibility is that not being an</p> <p>12 interracial contest may have made a</p> <p>13 difference.</p> <p>14 Q. So there is some element of</p> <p>15 support for these candidates that is not</p> <p>16 necessarily tied to the slate that they're</p> <p>17 running on, but may be related to other</p> <p>18 factors; is that about right?</p> <p>19 A. It's possible. It's possible.</p> <p>20 Q. Are you as confident in these</p> <p>21 results as you were in all of the prior</p> <p>22 ones?</p> <p>23 A. Yes.</p> <p>24 Q. And so looking back over the</p> <p>25 report, is the only set of EI estimates that</p>	<p style="text-align: right;">Page 165</p> <p>1 Cole</p> <p>2 you used, right?</p> <p>3 A. Yes.</p> <p>4 Q. In the third method of analysis</p> <p>5 you identify as Goodman single-equation</p> <p>6 ecological regression, right?</p> <p>7 A. Right.</p> <p>8 Q. Did you do a Goodman</p> <p>9 single-equation ecological regression</p> <p>10 analysis?</p> <p>11 A. What I should have said there to</p> <p>12 generate more clarity is "that correlation</p> <p>13 analysis from a Goodman single-equation</p> <p>14 analysis." The same variables were used in</p> <p>15 both.</p> <p>16 Q. I apologize. You have not</p> <p>17 generated more clarity yet, but maybe we</p> <p>18 will get there.</p> <p>19 What do you mean by that?</p> <p>20 A. I mean that in generating a</p> <p>21 correlation, we're looking at the association</p> <p>22 between two variables. In this case the</p> <p>23 racial composition of a precinct and the</p> <p>24 vote share for a candidate. Correlation</p> <p>25 looks at the association between the two.</p>

<p style="text-align: right;">Page 166</p> <p>1 Cole</p> <p>2 There is no prediction involved. It is an</p> <p>3 association.</p> <p>4 Q. How is that different from</p> <p>5 Goodman single-equation ecological</p> <p>6 regression?</p> <p>7 A. The formula is different. The</p> <p>8 formula for correlation is the covariance</p> <p>9 divided by the product that the -- the</p> <p>10 standard deviations of the two variables.</p> <p>11 That's one formula.</p> <p>12 The regression, which also uses</p> <p>13 the same two variables, but looks to predict</p> <p>14 how much vote share based on race using a</p> <p>15 least squares approach, but the basic</p> <p>16 formula is Y equals Ax plus B. A formula,</p> <p>17 an equation, Y equals Ax plus B.</p> <p>18 Q. So is this list in your report,</p> <p>19 where you list Goodman single-equation</p> <p>20 ecological regression, is that inaccurate?</p> <p>21 A. It's not inaccurate. To be</p> <p>22 clearer, I should have said, "correlation</p> <p>23 from." It's a correlation from the Goodman</p> <p>24 approach.</p> <p>25 Q. Are the problems identified in</p>	<p style="text-align: right;">Page 168</p> <p>1 Cole</p> <p>2 MR. LEVINE: I have no further</p> <p>3 questions.</p> <p>4 MS. CONNELL: I have no</p> <p>5 questions.</p> <p>6 MR. GROSSMAN: I do have some</p> <p>7 questions.</p> <p>8 EXAMINATION BY</p> <p>9 MR. GROSSMAN:</p> <p>10 Q. Good afternoon, Dr. Cole.</p> <p>11 A. Good afternoon.</p> <p>12 Q. Counsel asked you earlier to</p> <p>13 define what you meant by a Preliminary</p> <p>14 Expert Report. When you issued your opinion</p> <p>15 in this report, had you received any</p> <p>16 discovery from the district or the</p> <p>17 commissioner?</p> <p>18 A. The only discovery from the</p> <p>19 district is what I got from their website in</p> <p>20 terms of data.</p> <p>21 Q. To the best of your knowledge,</p> <p>22 the defendants in this case have not yet</p> <p>23 produced any documents that would have</p> <p>24 allowed you to further inform your analysis?</p> <p>25 A. No.</p>
<p style="text-align: right;">Page 167</p> <p>1 Cole</p> <p>2 the Grofman article that we discussed of</p> <p>3 using CVAP as your independent variable and</p> <p>4 having multiple racial categories equally</p> <p>5 applicable to the analysis that you did</p> <p>6 using Goodman single-equation ecological</p> <p>7 regression?</p> <p>8 A. Those critiques have to do with</p> <p>9 generating racial bloc voting estimates from</p> <p>10 a single equation. And at that point in</p> <p>11 time they were developing bivariate</p> <p>12 ecological regression, BERA, B-E-R-A, which</p> <p>13 in terms of the regression was an advance</p> <p>14 over just using the single regression.</p> <p>15 That's separate from what I did.</p> <p>16 Q. Why didn't you do the Goodman</p> <p>17 single-equation ecological regression that</p> <p>18 projects racial polarization?</p> <p>19 A. I didn't use the Goodman</p> <p>20 single-equation because research has shown</p> <p>21 when you compare those estimates to known</p> <p>22 individual level data, let's say from</p> <p>23 well-designed exit poll studies, that the EI</p> <p>24 estimates are more correct than the single</p> <p>25 regression estimates.</p>	<p style="text-align: right;">Page 169</p> <p>1 Cole</p> <p>2 Q. Is it possible that further data</p> <p>3 and information could further inform your</p> <p>4 analysis?</p> <p>5 A. Yes.</p> <p>6 Q. You testified before about</p> <p>7 receiving data from Steve White. You</p> <p>8 reviewed the accuracy of the data you</p> <p>9 received from Mr. White?</p> <p>10 A. I did.</p> <p>11 Q. Do you know if anyone else</p> <p>12 reviewed the accuracy of the data received</p> <p>13 from Mr. White?</p> <p>14 A. Yes.</p> <p>15 Q. Who else?</p> <p>16 A. Bill Cooper.</p> <p>17 Q. Did you find any errors in the</p> <p>18 data?</p> <p>19 A. No.</p> <p>20 Q. You testified before that you</p> <p>21 received election data in this case from</p> <p>22 websites. Do you recall which website</p> <p>23 contained the election data that you</p> <p>24 referred to earlier?</p> <p>25 A. It's the main East Ramapo</p>

<p style="text-align: right;">Page 170</p> <p>1 Cole</p> <p>2 Central School District data -- website.</p> <p>3 Q. You testified earlier that you</p> <p>4 were retained as an expert in February of</p> <p>5 2017. Can you clarify whether you were</p> <p>6 retained as a consulting expert or a</p> <p>7 testifying expert at that time?</p> <p>8 A. I was consulting at that time.</p> <p>9 I had not agreed or had an arrangement to</p> <p>10 testify at that point.</p> <p>11 Q. Do you recall approximately when</p> <p>12 you were retained as a testifying expert in</p> <p>13 this case?</p> <p>14 A. This is going to be a</p> <p>15 guesstimate. Maybe May or June, or</p> <p>16 something like that, of 2017.</p> <p>17 Q. How many methods of quantitative</p> <p>18 analysis are reflected in your report?</p> <p>19 A. Three.</p> <p>20 Q. Are all three of these methods</p> <p>21 peer-reviewed?</p> <p>22 A. Yes.</p> <p>23 Q. Are all of your analyses</p> <p>24 replicable?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 172</p> <p>1 Cole</p> <p>2 A. No.</p> <p>3 Q. Do you typically report those</p> <p>4 turnout outputs?</p> <p>5 A. No.</p> <p>6 Q. Have you ever been disqualified</p> <p>7 as an expert as a result of the Daubert</p> <p>8 motion?</p> <p>9 A. No.</p> <p>10 Q. You testified that you testified</p> <p>11 as an expert in approximately 30 voting</p> <p>12 rights cases overall; is that correct?</p> <p>13 A. Sounds right -- oh, let me take</p> <p>14 that back.</p> <p>15 Q. Let me actually rephrase the</p> <p>16 question.</p> <p>17 You testified that you have been</p> <p>18 retained as an expert in approximately 30</p> <p>19 voting rights cases; is that correct?</p> <p>20 A. That's correct.</p> <p>21 Q. Thank you.</p> <p>22 You were asked about your</p> <p>23 confidence in your EI estimates. Is it your</p> <p>24 testimony that you performed those EI</p> <p>25 calculations correctly?</p>
<p style="text-align: right;">Page 171</p> <p>1 Cole</p> <p>2 Q. And you retained all the data</p> <p>3 necessary to replicate all of your analyses?</p> <p>4 A. Yes.</p> <p>5 Q. Did you testify earlier that the</p> <p>6 EzI output generates standard error?</p> <p>7 A. Yes.</p> <p>8 Q. You've reported ecological</p> <p>9 inference estimates in approximately a dozen</p> <p>10 cases; is that accurate?</p> <p>11 A. That sounds about right, yes.</p> <p>12 Q. Do you always report the</p> <p>13 standard errors?</p> <p>14 A. No.</p> <p>15 Q. Do you typically report the</p> <p>16 standard errors?</p> <p>17 A. No.</p> <p>18 Q. Did you testify that the EzI</p> <p>19 program also generates estimates of turnout</p> <p>20 by race in its output?</p> <p>21 A. Yes.</p> <p>22 Q. The dozen or so cases in which</p> <p>23 you have produced reports using the</p> <p>24 ecological inference, do you always report</p> <p>25 those turnout outputs?</p>	<p style="text-align: right;">Page 173</p> <p>1 Cole</p> <p>2 A. Yes.</p> <p>3 Q. Is your level of confidence in</p> <p>4 your EI estimates reflective in any way of</p> <p>5 whether you performed your EI estimates</p> <p>6 correctly?</p> <p>7 A. Yes.</p> <p>8 Q. You analyzed 12 contested</p> <p>9 elections; is that correct -- strike that.</p> <p>10 You analyzed 12 contested</p> <p>11 elections for the board; is that correct?</p> <p>12 A. That's correct.</p> <p>13 Q. In 2015 did the EI conflict with</p> <p>14 the correlation analysis in any of the</p> <p>15 contests?</p> <p>16 A. No.</p> <p>17 Q. In 2016 did EI conflict with the</p> <p>18 correlation analysis in any of the contests?</p> <p>19 A. No.</p> <p>20 Q. In 2017 did the EI conflict with</p> <p>21 the correlation analysis in any of the</p> <p>22 contests?</p> <p>23 A. No.</p> <p>24 Q. Counsel asked you before about</p> <p>25 confidence intervals. What is the relation</p>

<p style="text-align: right;">Page 174</p> <p>1 Cole</p> <p>2 between standard error and confidence</p> <p>3 intervals?</p> <p>4 A. You used the standard error --</p> <p>5 you can use the standard error to generate</p> <p>6 confidence intervals.</p> <p>7 Q. So a standard error would allow</p> <p>8 you to understand -- strike that.</p> <p>9 A standard error would allow</p> <p>10 anyone to understand that your EI analysis</p> <p>11 was conducted reliably and correctly; is</p> <p>12 that an accurate statement?</p> <p>13 MR. LEVINE: Objection.</p> <p>14 Q. Let me rephrase.</p> <p>15 Does standard error reflect on</p> <p>16 the reliability of the calculation -- strike</p> <p>17 that one more time.</p> <p>18 Does standard error reflect on</p> <p>19 the reliability of an analysis?</p> <p>20 MR. LEVINE: Objection.</p> <p>21 A. I'm going to ask what you mean</p> <p>22 by "reliability."</p> <p>23 Q. That's an excellent question.</p> <p>24 What does standard error tell us</p> <p>25 about or tell you about whether you've</p>	<p style="text-align: right;">Page 176</p> <p>1 Cole</p> <p>2 Berkowitz and Alexandra Manigo, by what</p> <p>3 margin does Ms. Manigo receive a higher</p> <p>4 percentage of Black votes than</p> <p>5 Mr. Berkowitz?</p> <p>6 A. Approximately 32 percent.</p> <p>7 Q. If a candidate won an election</p> <p>8 by 32 percent, how would you characterize a</p> <p>9 victory of that magnitude?</p> <p>10 A. It would be of landslide</p> <p>11 proportions.</p> <p>12 Q. I would like you to turn your</p> <p>13 attention to HPA in this table. In each of</p> <p>14 these three elections how would you</p> <p>15 characterize the margin of victory among</p> <p>16 White voters for Mr. Berkowitz, Mr. Grossman</p> <p>17 and Mr. Freilich?</p> <p>18 A. Well, there are similar</p> <p>19 estimates and they're indicative of very</p> <p>20 high cohesion?</p> <p>21 Q. According to the HPA analysis,</p> <p>22 the White preferred candidate won every</p> <p>23 contested election that you analyzed?</p> <p>24 A. That's correct.</p> <p>25 Q. You used multiple -- you</p>
<p style="text-align: right;">Page 175</p> <p>1 Cole</p> <p>2 performed ecological inference analysis</p> <p>3 accurately -- strike that. I'll leave that</p> <p>4 alone.</p> <p>5 Does your review of the standard</p> <p>6 error -- strike that. Is the turnout for --</p> <p>7 strike that.</p> <p>8 How does your analysis of the</p> <p>9 2012 U.S. presidential election affect your</p> <p>10 confidence in your analysis of racially</p> <p>11 polarized voting in contests for election of</p> <p>12 the East Ramapo Central School District</p> <p>13 Board of Education?</p> <p>14 A. I analyzed the presidential</p> <p>15 contest in order to expand the number of</p> <p>16 voters involved in an interracial electoral</p> <p>17 contest, and the results were supportive of</p> <p>18 racially polarized voting in the school --</p> <p>19 amongst school district voters.</p> <p>20 Q. Turn to Table 2 on page 38 of</p> <p>21 your report. Look at the election</p> <p>22 between -- I am sorry, the contest between</p> <p>23 Mark Berkowitz and Alexandra Manigo. What</p> <p>24 is the margin of victory -- strike that.</p> <p>25 In the contest between Mark</p>	<p style="text-align: right;">Page 177</p> <p>1 Cole</p> <p>2 testified before that you used three</p> <p>3 separate measures of racially polarized</p> <p>4 voting analyses; is that correct?</p> <p>5 A. That's correct.</p> <p>6 Q. Where those quantitative</p> <p>7 measures conflict, is supplemental evidence</p> <p>8 valuable to resolve the tension?</p> <p>9 MR. LEVINE: Objection.</p> <p>10 A. They were helpful.</p> <p>11 Q. I would like to turn your</p> <p>12 attention to paragraph 64 on page 28 of your</p> <p>13 report -- strike that.</p> <p>14 Turn to paragraph 67 of your</p> <p>15 report, page 31.</p> <p>16 A. I'm with you.</p> <p>17 Q. What does this data tell you</p> <p>18 about the composition of the public school</p> <p>19 student body and the private school student</p> <p>20 body?</p> <p>21 MR. LEVINE: Objection.</p> <p>22 A. As I said earlier, these NYSED</p> <p>23 data indicated that the population at public</p> <p>24 schools is virtually almost all non-White</p> <p>25 and private school population is close to</p>

<p style="text-align: right;">Page 178</p> <p>1 Cole</p> <p>2 100 percent White.</p> <p>3 Q. Given the racial composition of</p> <p>4 the schools, do you think it's more or less</p> <p>5 likely that a slate that is preferred by</p> <p>6 advocates of investment in public schooling</p> <p>7 would be preferred by minority voters?</p> <p>8 MR. LEVINE: Objection.</p> <p>9 A. I would.</p> <p>10 Q. Let's try the question one more</p> <p>11 time.</p> <p>12 A. Yes.</p> <p>13 Q. Based on your understanding of</p> <p>14 the racial composition of the schools, how</p> <p>15 does that affect your understanding of how</p> <p>16 an organization that advocates for greater</p> <p>17 investment in the public schools would</p> <p>18 receive support from -- strike that.</p> <p>19 Turning your attention to</p> <p>20 paragraph 65, you were asked about an Op Ed</p> <p>21 written by Ms. Hatton; is that correct?</p> <p>22 A. Yes.</p> <p>23 Q. The Op Ed received a response</p> <p>24 from Yehuda Weissmandl, President of East</p> <p>25 Ramapo Central School District Board of</p>	<p style="text-align: right;">Page 180</p> <p>1 Cole</p> <p>2 over the past five years without any</p> <p>3 specific plans?</p> <p>4 A. No.</p> <p>5 Q. Have you used EI analysis in</p> <p>6 other reports where you've testified as an</p> <p>7 expert in which there were multiple, more</p> <p>8 than two racial groups in the community --</p> <p>9 strike that.</p> <p>10 Did you use correlation analysis</p> <p>11 in reports where there were more than two</p> <p>12 racial groups in a community?</p> <p>13 A. Yes.</p> <p>14 Q. Those reports were not excluded</p> <p>15 as the result of Daubert challenges; is that</p> <p>16 correct?</p> <p>17 A. Correct.</p> <p>18 Q. What does the term "statistical</p> <p>19 significance" mean?</p> <p>20 A. You establish a level of</p> <p>21 statistical significance, it allows you to</p> <p>22 state that your result is not happening by</p> <p>23 chance alone at a particular level.</p> <p>24 Q. Are there social science</p> <p>25 analyses that you're aware of that use a</p>
<p style="text-align: right;">Page 179</p> <p>1 Cole</p> <p>2 Education; is that correct?</p> <p>3 A. That's correct.</p> <p>4 Q. Does the fact that</p> <p>5 Mr. Weissmandl responded to Ms. Hatton's</p> <p>6 Op Ed lend credibility to her piece?</p> <p>7 MR. LEVINE: Objection.</p> <p>8 Q. In your mind?</p> <p>9 MR. LEVINE: Objection.</p> <p>10 A. It would lead me to believe that</p> <p>11 he felt the need to respond to it would</p> <p>12 indicate her letter was of some importance.</p> <p>13 Q. Do you recall if</p> <p>14 Mr. Weissmandl's Op Ed contradicted any of</p> <p>15 the points Ms. Hatton made about whether</p> <p>16 Mr. Charles, Mr. Germain and</p> <p>17 Mr. Corado (sic) skipped the NAACP forum?</p> <p>18 A. No.</p> <p>19 Q. Do you recall whether</p> <p>20 Mr. Weissmandl's Op Ed contradicted</p> <p>21 Ms. Hatton's point that the public school</p> <p>22 community was suspicious of Charles, Germain</p> <p>23 and Corado because they refused to return</p> <p>24 calls to the press and made implausible</p> <p>25 promises to restore almost every program cut</p>	<p style="text-align: right;">Page 181</p> <p>1 Cole</p> <p>2 statistical significance level of p value of</p> <p>3 .2?</p> <p>4 MR. LEVINE: Objection.</p> <p>5 A. Yes.</p> <p>6 Q. What analysis?</p> <p>7 A. In the area of Medicare/Medicaid</p> <p>8 fraud audits. I should say, alleged fraud</p> <p>9 audits.</p> <p>10 Q. It's your understanding that</p> <p>11 when those audits are conducted and yield</p> <p>12 results of a p value of .2, what does that</p> <p>13 indicate?</p> <p>14 A. When demands are made for</p> <p>15 repayment, a lower level of confidence</p> <p>16 interval is used.</p> <p>17 Q. So is there still some value to</p> <p>18 results that report a p value of .2?</p> <p>19 A. Yes. Oh, yes.</p> <p>20 Q. You testified earlier that you</p> <p>21 did not perform any analysis of racially</p> <p>22 polarized voting on the 2014 election?</p> <p>23 A. Yes.</p> <p>24 Q. Did you review supplemental</p> <p>25 evidence regarding the 2014 election?</p>

<p style="text-align: right;">Page 182</p> <p>1 Cole</p> <p>2 A. I did.</p> <p>3 Q. Is that evidence of racially</p> <p>4 polarized voting?</p> <p>5 A. I believe the take-home story</p> <p>6 from that supplemental evidence was that</p> <p>7 residents that typically support a public</p> <p>8 school slate felt that running candidates</p> <p>9 would be futile.</p> <p>10 Q. Did that inform your analysis of</p> <p>11 racially polarized voting?</p> <p>12 A. Yes.</p> <p>13 Q. Earlier you mentioned a</p> <p>14 representative sample of supplemental data.</p> <p>15 What did you mean by the term</p> <p>16 "representative sample"?</p> <p>17 A. Relied upon a sample that was</p> <p>18 representative of the sites that were</p> <p>19 systematically generated.</p> <p>20 Q. Looking at the 2013 election,</p> <p>21 Table 2, page 40, what does the HPA indicate</p> <p>22 in terms of White support for the winning</p> <p>23 candidates Corado, Germain and Charles?</p> <p>24 A. Consistent across all three</p> <p>25 candidates at very high levels of cohesion.</p>	<p style="text-align: right;">Page 184</p> <p>1 Cole</p> <p>2 vote respectively?</p> <p>3 MR. LEVINE: Objection.</p> <p>4 A. It would lead me to believe</p> <p>5 there is an inconsistency there.</p> <p>6 MR. GROSSMAN: I have nothing</p> <p>7 further.</p> <p>8 MR. LEVINE: I have a few</p> <p>9 questions.</p> <p>10 EXAMINATION (CONT'D)</p> <p>11 BY MR. LEVINE:</p> <p>12 Q. I have a few more redirect</p> <p>13 questions.</p> <p>14 When I asked you before if you</p> <p>15 had all of the data that you required to</p> <p>16 perform your ecological inference analysis,</p> <p>17 you answered yes.</p> <p>18 How could obtaining discovery of</p> <p>19 the district influence your ecological</p> <p>20 inference analysis?</p> <p>21 A. I'm not so sure it influenced</p> <p>22 the EI analysis. It might have some bearing</p> <p>23 on the supplemental data that I collected.</p> <p>24 Q. As you sit here today, can you</p> <p>25 think of any evidence that you might receive</p>
<p style="text-align: right;">Page 183</p> <p>1 Cole</p> <p>2 Q. Corado, Germain and Charles each</p> <p>3 won the White vote by a margin of</p> <p>4 approximately 70 points; is that accurate?</p> <p>5 A. In those homogenous precincts,</p> <p>6 yes.</p> <p>7 Q. The vote totals, looking at the</p> <p>8 vote totals, do those elections reflect such</p> <p>9 as wide margin?</p> <p>10 MR. LEVINE: Objection.</p> <p>11 MR. GROSSMAN: Let me rephrase.</p> <p>12 Q. What is the approximate margin</p> <p>13 of victory in terms of total votes for</p> <p>14 candidates Corado, Germain and Charles?</p> <p>15 A. Approximately 1700, 16 to 17</p> <p>16 hundred votes.</p> <p>17 Q. Do the HPA analysis and margin</p> <p>18 of victory in terms of total votes inform</p> <p>19 your confidence in whether the EI -- strike</p> <p>20 that.</p> <p>21 Does the HPA and the margin of</p> <p>22 victory in terms of total votes affect your</p> <p>23 confidence in whether MaraLuz Corado, Pierre</p> <p>24 Germain and Bernard Charles actually won</p> <p>25 73.9, 91.8 and 89.7 percent of the Black</p>	<p style="text-align: right;">Page 185</p> <p>1 Cole</p> <p>2 that would somehow change your opinions?</p> <p>3 A. Not at this time.</p> <p>4 Q. Take a look at your report and</p> <p>5 turn to the last page Table 4a, page 45.</p> <p>6 You were asked whether based upon your</p> <p>7 analysis the White preferred voter -- sorry,</p> <p>8 the White preferred candidate had won every</p> <p>9 single election that you analyzed and you</p> <p>10 answered yes, but that's not true, is it,</p> <p>11 because in your analysis of the 2012</p> <p>12 presidential election the Black preferred</p> <p>13 candidate won and the White preferred</p> <p>14 candidate lost at least for this</p> <p>15 jurisdiction, right?</p> <p>16 A. I was answering with respect to</p> <p>17 the district contests.</p> <p>18 Q. All right.</p> <p>19 So the question asked you -- I</p> <p>20 know because I paid very close attention.</p> <p>21 The question asked you whether the White</p> <p>22 preferred candidate won every election that</p> <p>23 you analyzed and so the answer to that</p> <p>24 question is no, right?</p> <p>25 A. That's correct.</p>

<p style="text-align: right;">Page 186</p> <p>1 Cole</p> <p>2 Q. Right. Because the 2012</p> <p>3 election, the Black preferred candidate won</p> <p>4 and the White preferred candidate lost,</p> <p>5 right?</p> <p>6 A. That's correct.</p> <p>7 Q. For this 2012 presidential</p> <p>8 election you be analyzed only election</p> <p>9 districts that were totally within the East</p> <p>10 Ramapo school boundaries, correct?</p> <p>11 A. Correct.</p> <p>12 Q. The vote totals reflected in</p> <p>13 your table are significantly greater than</p> <p>14 the vote totals in school board elections,</p> <p>15 right?</p> <p>16 A. Right.</p> <p>17 Q. Does that suggest that the</p> <p>18 turnout for this presidential election is</p> <p>19 significantly greater than it would be for</p> <p>20 school board elections?</p> <p>21 A. It certainly is greater.</p> <p>22 Q. Did you perform a turnout</p> <p>23 estimate or generate a turnout estimate for</p> <p>24 this presidential election?</p> <p>25 A. Turnout estimates were</p>	<p style="text-align: right;">Page 188</p> <p>1 Cole</p> <p>2 win.</p> <p>3 Q. Look at page 13 of your report,</p> <p>4 you concluded in paragraph 75 that --</p> <p>5 MR. GROSSMAN: Wrong page.</p> <p>6 Q. Page 33, paragraph 75, you</p> <p>7 concluded "as with the 2015, 2016 and 2017</p> <p>8 board elections, for East Ramapo voters in</p> <p>9 the 2012 U.S. president election was</p> <p>10 racially polarized with a coalition of Black</p> <p>11 and Latino voters coalescing around Obama</p> <p>12 and White voters supporting Romney."</p> <p>13 Why is that relevant to your</p> <p>14 conclusions with respect to the East Ramapo</p> <p>15 Central School District elections?</p> <p>16 A. It's an indication of highly</p> <p>17 racially polarized voting.</p> <p>18 Q. You were asked if your analysis</p> <p>19 performed in your report was replicable.</p> <p>20 You answered yes. You were asked if the</p> <p>21 data was retained and you said yes.</p> <p>22 Are you able to collect and</p> <p>23 produce all of the data necessary for</p> <p>24 someone to replicate your analysis?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 187</p> <p>1 Cole</p> <p>2 generated.</p> <p>3 Q. Were they retained?</p> <p>4 A. Yes.</p> <p>5 Q. Did you generate a confidence</p> <p>6 interval for your estimates for this</p> <p>7 election?</p> <p>8 A. No.</p> <p>9 Q. Are exogenous elections as</p> <p>10 probative as endogenous elections?</p> <p>11 A. Usually not.</p> <p>12 Q. Is this presidential election</p> <p>13 particularly probative for some reason?</p> <p>14 A. It's probative because it</p> <p>15 indicates high levels of racially polarized</p> <p>16 voting with a larger electorate than the</p> <p>17 district contests.</p> <p>18 Q. Doesn't it indicate that with</p> <p>19 higher levels of turnout Black preferred</p> <p>20 candidates can win even without White voter</p> <p>21 support in these East Ramapo districts?</p> <p>22 A. Well, in this contest with this</p> <p>23 level of voter participation and the turnout</p> <p>24 levels -- I mean, and the cohesion levels,</p> <p>25 the Black preferred candidate was able to</p>	<p style="text-align: right;">Page 189</p> <p>1 Cole</p> <p>2 Q. Have you been asked to do that</p> <p>3 yet?</p> <p>4 MR. GROSSMAN: You can answer.</p> <p>5 A. Not specifically. I've been</p> <p>6 asked if I have the data to be able to do</p> <p>7 that.</p> <p>8 Q. You were asked whether in the</p> <p>9 past you have reported on the standard error</p> <p>10 generated as part of generating your</p> <p>11 estimates. You answered that you don't</p> <p>12 typically report the standard error.</p> <p>13 Have you ever reported in other</p> <p>14 prior cases your confidence intervals for</p> <p>15 your estimates?</p> <p>16 A. No.</p> <p>17 Q. You've never reported your</p> <p>18 confidence intervals in any report that</p> <p>19 you've ever filed in the court?</p> <p>20 A. In a voting rights case, that's</p> <p>21 correct.</p> <p>22 Q. You were asked about the 2013</p> <p>23 election and specifically you were asked</p> <p>24 whether the EI analysis that you performed</p> <p>25 conflicted with the correlation analysis and</p>

<p style="text-align: right;">Page 190</p> <p>1 Cole</p> <p>2 I just didn't understand the question and so</p> <p>3 I didn't understand your answer.</p> <p>4 How could the EI analysis and</p> <p>5 the correlation analysis conflict; don't</p> <p>6 they measure different things?</p> <p>7 A. I believe I answered it using a</p> <p>8 different word than "conflict."</p> <p>9 Q. Right.</p> <p>10 Was that intentional?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. So what is the better --</p> <p>13 what is the better way to describe that?</p> <p>14 A. I'd say, not consistent,</p> <p>15 something like that.</p> <p>16 Q. So I had asked you earlier</p> <p>17 whether it's possible for your correlation</p> <p>18 analysis that you performed for the 2013</p> <p>19 elections, specifically with respect to</p> <p>20 Black voters, and your EI analysis with</p> <p>21 respect to the Black voter in 2013 to both</p> <p>22 be reliable, both estimates. Do you recall</p> <p>23 that?</p> <p>24 A. Not specifically.</p> <p>25 Q. So you don't recall when I asked</p>	<p style="text-align: right;">Page 192</p> <p>1 Cole</p> <p>2 anything to do with each other. Am I wrong?</p> <p>3 A. Yes.</p> <p>4 Q. What do they have to do with</p> <p>5 each other?</p> <p>6 A. Correlation coefficient is a</p> <p>7 measure of the strength of the relationship</p> <p>8 between racial composition of precincts and</p> <p>9 voter outcome. And the EI produces specific</p> <p>10 estimates which are another indication of</p> <p>11 the magnitude of polarized voting.</p> <p>12 Q. So what I'm asking is: Is it</p> <p>13 possible for your correlation analysis to</p> <p>14 accurately reflect the increasing degree of</p> <p>15 Black voter support for a certain candidate</p> <p>16 and have your EI estimate of the share of</p> <p>17 Black voter support for the candidates in</p> <p>18 2012 to be -- or 2013, rather, to be the</p> <p>19 same?</p> <p>20 A. It's possible.</p> <p>21 Q. Right.</p> <p>22 That means that those two</p> <p>23 analyses are not necessarily inconsistent,</p> <p>24 right?</p> <p>25 A. Not necessarily.</p>
<p style="text-align: right;">Page 191</p> <p>1 Cole</p> <p>2 you that question?</p> <p>3 A. As I said, I don't recall that</p> <p>4 specific question.</p> <p>5 Q. All right. Well, we can go over</p> <p>6 it again.</p> <p>7 Is it possible that both your</p> <p>8 correlation analysis for the Black voters in</p> <p>9 2013 and your EI estimate for the Black</p> <p>10 voters in 2013 to both be reliable?</p> <p>11 A. If I didn't before, I'll ask it</p> <p>12 now, what do you mean by "reliable"?</p> <p>13 Q. Meaning -- well, is it possible</p> <p>14 that your correlation analysis can generate</p> <p>15 a reliable indicator; for example, of</p> <p>16 increasing minority support for particular</p> <p>17 candidates in different polling places and</p> <p>18 have your EI analysis still be as reliable</p> <p>19 as it otherwise would be?</p> <p>20 A. Once again, what do you mean by</p> <p>21 "reliable"?</p> <p>22 Q. Here is the thing, I don't</p> <p>23 understand why you say that your correlation</p> <p>24 analysis necessarily is inconsistent with</p> <p>25 your EI estimate. I don't think they have</p>	<p style="text-align: right;">Page 193</p> <p>1 Cole</p> <p>2 Q. Right.</p> <p>3 Is there any reason to think</p> <p>4 that they are inconsistent?</p> <p>5 A. Yes. As I said in my report,</p> <p>6 the correlational analysis is more</p> <p>7 consistent with facts on the ground than the</p> <p>8 EI estimates.</p> <p>9 Q. If I also recall correctly your</p> <p>10 correlation analysis for the 2013 election</p> <p>11 for the Black voters, you did not generate</p> <p>12 an estimate that was statistically</p> <p>13 significant, right?</p> <p>14 A. That's correct, but the effect</p> <p>15 size of those correlations was of the</p> <p>16 magnitude that one can rely upon them.</p> <p>17 Q. Right.</p> <p>18 So the not statistically</p> <p>19 significant correlation analysis that is not</p> <p>20 necessarily inconsistent with the EI</p> <p>21 estimate that you generated is outweighed by</p> <p>22 facts on the ground; is that your testimony?</p> <p>23 A. I'm saying that the correlation</p> <p>24 coefficient is consistent with facts on the</p> <p>25 ground, and those -- and homogenous precinct</p>

<p style="text-align: right;">Page 194</p> <p>1 Cole</p> <p>2 analysis, and those --</p> <p>3 Q. Hold on a second. You didn't do</p> <p>4 a homogenous precinct analysis for Black</p> <p>5 voters in 2013?</p> <p>6 A. That's true. For the White</p> <p>7 cohesion, for the White analysis, the</p> <p>8 correlation coefficient was consistent with</p> <p>9 homogenous precinct analysis and EI and the</p> <p>10 supplemental evidence.</p> <p>11 Q. Right.</p> <p>12 Isn't the White voter EI that</p> <p>13 you estimate, isn't that generated</p> <p>14 independently of your Black voter EI?</p> <p>15 A. Yes.</p> <p>16 Q. So your correlation analysis is</p> <p>17 not necessarily inconsistent with your EI</p> <p>18 estimate for Black voters in 2013; is that a</p> <p>19 fair sum up?</p> <p>20 A. Could repeat that?</p> <p>21 Q. Your correlation analysis for</p> <p>22 Black voters in 2013 is not necessarily</p> <p>23 inconsistent with your EI estimate for Black</p> <p>24 voters in 2013; is that a fair sum up?</p> <p>25 A. No. I would say that -- did you</p>	<p style="text-align: right;">Page 196</p> <p>1 Cole</p> <p>2 coefficient can inform the analyst about</p> <p>3 racially polarized voting.</p> <p>4 Q. Do the results of the</p> <p>5 correlation coefficient ever tell you the</p> <p>6 percentage by race of support for a</p> <p>7 candidate?</p> <p>8 A. That's not what it is meant to</p> <p>9 do.</p> <p>10 Q. Right.</p> <p>11 So the results of a correlation</p> <p>12 analysis are always going to be different</p> <p>13 than an ecological inference analysis,</p> <p>14 right?</p> <p>15 A. They measure different aspects</p> <p>16 of racially polarized voting. The</p> <p>17 correlation coefficient, as I said before,</p> <p>18 measures the strength of the association</p> <p>19 between racial composition of the precincts</p> <p>20 and voter outcome; whereas, EI is a</p> <p>21 different reflection, different kinds of</p> <p>22 estimates, but does inform you about</p> <p>23 racially polarized voting.</p> <p>24 Q. Is there some particular output</p> <p>25 from your correlation analysis that you</p>
<p style="text-align: right;">Page 195</p> <p>1 Cole</p> <p>2 say not necessarily consistent?</p> <p>3 Q. I said, "not necessarily</p> <p>4 inconsistent."</p> <p>5 A. I'd say it's not -- I would</p> <p>6 prefer to say that the different results</p> <p>7 from the correlation analysis and the EI</p> <p>8 analysis for Black voters in 2013 without</p> <p>9 supplemental evidence would lead me -- it</p> <p>10 would be inconclusive.</p> <p>11 MR. LEVINE: Could you read that</p> <p>12 answer back?</p> <p>13 (Record read.)</p> <p>14 Q. I hate to keep going after that</p> <p>15 one subject, but I remain confused because</p> <p>16 what do you mean when you say "different</p> <p>17 results from the correlation analysis and</p> <p>18 the EI estimate," they don't generate the</p> <p>19 same results ever, they measure different</p> <p>20 things, right?</p> <p>21 A. They measure different aspects</p> <p>22 of racially polarized voting.</p> <p>23 Q. What do you mean by "different</p> <p>24 results"?</p> <p>25 A. The results from the correlation</p>	<p style="text-align: right;">Page 197</p> <p>1 Cole</p> <p>2 would want to see to confirm a particular</p> <p>3 result in your ecological inference</p> <p>4 analysis?</p> <p>5 MR. GROSSMAN: Objection.</p> <p>6 A. A correlation coefficient is a</p> <p>7 correlation coefficient. That's the result.</p> <p>8 Q. Since I believe this is a</p> <p>9 paraphrase of your own testimony, let's try</p> <p>10 it one more time to sum up.</p> <p>11 The results of your correlation</p> <p>12 analysis for the 2013 election with respect</p> <p>13 to Black voters is not necessarily</p> <p>14 inconsistent with your estimate of the</p> <p>15 support of Black voters for candidates in</p> <p>16 the 2013 election?</p> <p>17 MR. GROSSMAN: Objection.</p> <p>18 A. You asked me that question</p> <p>19 before and I answered it differently with a</p> <p>20 different set of words.</p> <p>21 Q. Which is why I asked it again.</p> <p>22 Would you like me to ask it one more time to</p> <p>23 see if I can get you to reanswer it one more</p> <p>24 time?</p> <p>25 A. Can you rephrase it?</p>

<p style="text-align: right;">Page 198</p> <p>1 Cole</p> <p>2 Q. If it will make more sense,</p> <p>3 right?</p> <p>4 A. Yeah.</p> <p>5 Q. All right.</p> <p>6 The results of your correlation</p> <p>7 analysis for the 2013 election, Black</p> <p>8 voters, are not inconsistent -- rather not</p> <p>9 necessarily inconsistent with your EI</p> <p>10 estimate of Black voter support for</p> <p>11 candidates in the 2013 election?</p> <p>12 A. I think that is essentially the</p> <p>13 same wording. You're saying "not</p> <p>14 necessarily inconsistent"?</p> <p>15 Q. Um-hum.</p> <p>16 A. And I'm saying that they are</p> <p>17 inconsistent.</p> <p>18 Q. You're saying they are</p> <p>19 inconsistent?</p> <p>20 A. For the Black voters, the EI and</p> <p>21 correlational results are not consistent.</p> <p>22 Q. Why do you think that is?</p> <p>23 A. I don't know.</p> <p>24 Q. Do you think that's because your</p> <p>25 EI analysis is mistaken?</p>	<p style="text-align: right;">Page 200</p> <p>1 Cole</p> <p>2 produce your analysis. You said "no"</p> <p>3 before. Have you -- you've retained all of</p> <p>4 those data and documents, correct?</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>
<p style="text-align: right;">Page 199</p> <p>1 Cole</p> <p>2 A. I don't think so.</p> <p>3 Q. Do you think that's because your</p> <p>4 correlation analysis might be mistaken?</p> <p>5 A. I don't think so.</p> <p>6 Q. Is either one of those possible?</p> <p>7 A. Possible; not likely, but</p> <p>8 possible.</p> <p>9 Q. It's a conundrum; if your EI</p> <p>10 analysis for 2013 for the Black voters is</p> <p>11 unreliable or inconsistent, what makes the</p> <p>12 rest of your EI worth paying attention to?</p> <p>13 MR. GROSSMAN: Objection.</p> <p>14 A. I'm confident in the results. I</p> <p>15 just can't explain them for that 2013.</p> <p>16 MR. LEVINE: No further</p> <p>17 questions.</p> <p>18 MR. GROSSMAN: Let me clarify</p> <p>19 one sort of technical thing very</p> <p>20 briefly.</p> <p>21 EXAMINATION (CONT'D)</p> <p>22 BY MR. GROSSMAN:</p> <p>23 Q. Counsel asked you whether you</p> <p>24 have been asked to collect the data and</p> <p>25 documents that you would use in order to</p>	<p style="text-align: right;">Page 201</p> <p>1 Cole</p> <p>2 A. Yeah, I believe I answered -- I</p> <p>3 believe I answered it that way.</p> <p>4 Q. Okay, sorry. Just I wanted to</p> <p>5 make clear that we've already done that</p> <p>6 retention.</p> <p>7 MR. GROSSMAN: We're done.</p> <p>8 MR. LEVINE: That concludes the</p> <p>9 deposition. Thank you very much. I</p> <p>10 appreciate your time.</p> <p>11 (Time noted: 5:32 p.m.)</p> <p>12</p> <p>13 STEVEN PARKER COLE, Ph.D.</p> <p>14</p> <p>15 Subscribed and sworn to before me</p> <p>16 this ____ day of _____, 201__.</p> <p>17</p> <p>18 _____</p> <p>19 Notary Public</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

<p style="text-align: right;">Page 202</p> <p>1 2 C E R T I F I C A T E 3 STATE OF NEW YORK) 4 : ss. 5 COUNTY OF NEW YORK) 6 I, THERESA TRAMONDO, a Notary 7 Public within and for the State of New 8 York, do hereby certify: 9 That Steven Parker Cole, Ph.D., 10 the witness whose deposition is 11 hereinbefore set forth, was duly sworn by 12 me and that such deposition is a true 13 record of the testimony given by the 14 witness. 15 I further certify that I am not 16 related to any of the parties to this 17 action by blood or marriage, and that I am 18 in no way interested in the outcome of 19 this matter. 20 IN WITNESS WHEREOF, I have 21 hereunto set my hand this 13th day of 22 February, 2018. 23 <i>Theresa Tramondo</i> 24 _____ 25 THERESA TRAMONDO</p>	<p style="text-align: right;">Page 204</p> <p>1 NAACP v. ERCSD 2 Steven Parker Cole , Ph.D. 3 INSTRUCTIONS TO THE WITNESS 4 Please read your deposition over 5 carefully and make any necessary corrections. 6 You should state the reason in the 7 appropriate space on the errata sheet for any 8 corrections that are made. 9 After doing so, please sign the errata 10 sheet and date it. 11 You are signing same subject to the 12 changes you have noted on the errata sheet, 13 which will be attached to your deposition. 14 It is imperative that you return the 15 original errata sheet to the deposing 16 attorney within thirty (30) days of receipt 17 of the deposition transcript by you. If you 18 fail to do so, the deposition transcript may 19 be deemed to be accurate and may be used in 20 court. 21 22 23 24 25 2808166</p>
<p style="text-align: right;">Page 203</p> <p>1 2 ----- I N D E X ----- 3 WITNESS EXAMINATION BY PAGE 4 S.P. COLE MR. LEVINE 5/184 5 MR. GROSSMAN 168/199 6 ----- INFORMATION REQUESTS ----- 7 DIRECTIONS: (NONE) 8 RULINGS: (NONE) 9 TO BE FURNISHED: (NONE) 10 REQUESTS: (NONE) 11 MOTIONS: (NONE) 12 CONFIDENTIAL: (NONE) 13 ----- EXHIBITS ----- 14 COLE FOR ID. 15 Cole Exhibit 1, Curriculum vitae 9 16 of Steven P. Cole, Ph.D., dated 17 December 2017 18 Cole Exhibit 2, Preliminary Expert 29 19 Report of Steven P. Cole, Ph.D. 20 Cole Exhibit 3, article cited in 108 21 Footnote 17 of expert report 22 Cole Exhibit 4, Annual Budget and 158 23 Trustee Vote for May 16, 2017 24 Official Results 25 (EXHIBITS RETAINED BY REPORTER.)</p>	<p style="text-align: right;">Page 205</p> <p>1 NAACP v. ERCSD 2 Steven Parker Cole , Ph.D. 3 E R R A T A 4 ----- 5 PAGE LINE CHANGE 6 ----- 7 Reason: _____ 8 ----- 9 Reason: _____ 10 ----- 11 Reason: _____ 12 ----- 13 Reason: _____ 14 ----- 15 Reason: _____ 16 ----- 17 Reason: _____ 18 ----- 19 Reason: _____ 20 ----- 21 Reason: _____ 22 ----- 23 Reason: _____ 24 ----- 25 2808166</p>

1 NAACP v. ERCSD

2 Steven Parker Cole , Ph.D.

3 ACKNOWLEDGMENT OF DEPONENT

4 I, _____, do

5 hereby certify that I have read the foregoing

6 pages and that the same is a correct

7 transcription of the answers given by

8 me to the questions therein propounded,

9 except for the corrections or changes in form

10 or substance, if any, noted in the attached

11 Errata Sheet.

12

13

14 _____
DATE

SIGNATURE

15

16

17

18

19

20

21

22

23

24

25 2808166

[& - 2:13]

Page 1

&	150 28:15	192:18	2016 11:5 41:14
& 1:18 2:6 3:6 7:18	158 203:22	2013 41:8 44:6,13	54:16 151:18
0	16 158:9,14 183:15 203:23	44:17,22 45:2,5,14	163:10 173:17
0.3 145:21	168/199 203:5	62:7 63:4,16 64:4	188:7
0.5 143:21,22	17 104:11 108:2,8	70:19 71:14,20	2017 9:9 10:3
0.7 130:20 132:19 133:17	108:15 125:13	73:12,18,25 74:9	27:17,19 28:2,6,10
001 101:18	183:15 203:21	74:16,23 75:14	28:21 41:16 54:16
021 101:19	1700 183:15	76:20 79:24 80:7	123:4 157:15,16
08943 1:7	18 74:25 120:15	80:11,18,25 81:25	157:19,22 158:2,9
1	19 130:8	82:17 83:2,10,16	158:14 159:6
1 9:6,7,17,21 45:17 203:15	1969 125:8	83:22 84:9,15,20	160:6,11,19 170:5
1.2 151:22	1989 104:17 114:8 114:12,16	85:3,7 86:14 87:7	170:16 173:20
1.4 152:7	1990s 65:19	87:16 88:6 89:5,9	188:7 203:17,23
10 24:21,22 25:15	1993 14:14	92:14,19 93:3	2018 1:12 202:22
10.6 95:5	1995 16:9,11	95:11 96:23 99:22	202-373-6541 3:15
100 132:10 178:2	1997 77:23 78:13 78:25 114:19	100:4,21 102:17	21 62:7 74:16
10004 2:17	1:30 101:22	115:5 119:7,17	95:11 99:22
10022-4834 2:8	2	120:17 121:14,20	102:17 164:4
101 1:18	2 9:12,18 11:4	122:7 123:19,21	212-416-8965 3:24
10271-0332 3:21	17:20,24 18:13	124:6,8 129:2,7,9	212-607-3347 2:20
10598 5:9	19:25 20:4 22:16	129:15,20,22	212-9061200 2:11
108 203:20	25:11 29:19,20,25	137:25 138:5	22 164:21
10:07 1:13	30:17 40:25 45:19	164:4 182:20	23 152:21 154:10
11 72:19 103:22 107:9	61:16,18 102:14	189:22 190:18,21	155:9,12
1111 3:7	164:20 175:20	191:9,10 192:18	24 156:2
12 103:25 173:8,10	181:3,12,18	193:10 194:5,18	25 29:16 54:11
120 3:20	182:21 203:18	194:22,24 195:8	25.2 148:18
125 2:16	20 25:7,13,16 26:5 78:16 82:11	197:12,16 198:7	26 10:16 72:5,12
1250 2:24	20004-2541 3:8	198:11 199:10,15	72:13,16,17,19
13 188:3	20005 2:25	2013-2017 61:19	28 86:11 98:21
1315 5:7	201 201:16	2014 41:10 42:14	177:12
13th 202:21	2010 42:7	42:18 181:22,25	28.1 144:21
140 29:4	2011 42:4	2015 41:12 120:15	2808166 204:25
142 115:19,19	2012 13:2,25 14:5	123:4 125:13	205:25 206:25
15 24:21,22 25:6 25:16	41:19,25 42:21	130:9 134:25	29 118:7 203:18
	45:6 175:9 185:11	135:7 136:24	29.3 64:13,20,24
	186:2,7 188:9	137:6,15 138:6,9	93:6
		138:14,17 140:18	2:13 102:3
		141:19 143:15	
		148:10 173:13	
		188:7	

[3 - advantages]

Page 2

3	4a 185:5	74.6 135:24	accuracy 37:14
3 108:6,7 122:6	5	75 188:4,6	72:8,25 73:5,9,12
203:20	5 54:8 110:19	77 154:4,21 156:9	73:17 77:8 169:8
3,000 132:13	5/184 203:4	77.2 152:19 154:19	169:12
3.4 162:24	50 52:5 115:18,22	78 155:23 156:10	accurate 8:21
3.6 136:7,18,19	115:24	7:17 1:7	25:14 34:3 171:10
30 22:19 23:20	51 55:8,12,17 56:5	8	174:12 183:4
133:2,22 172:11	56:15,16 57:17	8 26:17 164:20	204:19
172:18 204:16	58:4,10	80 57:16 58:3,9	accurately 175:3
30.2 94:12	55 54:25 55:2	885 2:7	192:14
30.5 93:21	59.9 144:12 145:11	89.7 115:8 183:25	achieve 103:10
30030 5:10	595 108:17,19	9	115:13
31 116:11 125:6	109:23	9 121:19 122:4,5	acknowledgment
177:15	5:32 201:11	122:17 141:22	206:3
31.6 94:25	6	164:23 203:15	act 17:15,19,21
32 176:6,8	6 1:12 49:22 50:25	90 56:21 79:19	127:3
33 188:6	141:21 148:22	91.8 81:24 82:16	acted 25:24
350 2:24	6,380 132:13 133:8	82:25 83:9,15,22	action 202:17
36.2 135:17	60 56:7 120:11,14	84:7 183:25	activist 118:9
36.5 160:23	60/40 56:8	94.2 161:7	actual 20:13 98:24
38 11:4 175:20	64 86:12 177:12	95 79:9	145:5,9
39 130:8 143:19	64.2 130:24 131:23	99.1 152:3	adam 3:11
151:19	132:18 133:13	99.4 94:21 143:25	adam.adler 3:14
4	134:14	146:3 162:22	add 10:7,9 86:2,8
4 158:7,8,13	65 178:20	99.5 94:7	132:10 134:6
203:22	67 177:14	99.6 92:22 93:2	addition 111:7
4,600 132:13	68 116:12,13	152:12	additional 32:11
133:11	148:12	a	72:21 78:18
40 61:17 92:16	68.8 160:24	a.m. 1:13	address 5:6,7,25
115:4 129:3,6	69 116:20 125:6,7	able 8:20 35:19,20	addresses 34:16
142:23 143:4	7	70:12 98:25	34:17 35:13,19
144:9 145:7	7 131:24 134:15	100:17 131:22,24	36:10
182:21	7.6 94:16 161:5	133:4 136:13	adjunct 13:2,7
43 102:15	70 52:23 183:4	187:25 188:22	14:14
44 103:17	70/30 56:10	189:6	adler 3:11
45 185:5	72.1 144:17	absolute 101:8,15	administrators
46 45:19	721 5:9	accepted 10:18	52:6,8
468 131:14 132:11	73.9 64:7 75:15,17	account 143:10	advance 167:13
49 55:9,11,17	183:25	accounts 97:18,18	advancement 1:4
			advantages 72:6
			72:21

[advocate - aos]

Page 3

advocate 90:25 advocates 89:16 90:2,4,12,21 123:12 178:6,16 advocating 49:25 affect 146:18 175:9 178:15 183:22 affective 10:18 affirmative 46:17 47:7 afternoon 168:10 168:11 ag.ny.gov 3:23 age 69:18,21 110:24 111:23,24 112:10 113:9,22 137:3 agenda 89:17 agendas 126:13 aggregate 36:13 aggregated 36:7 aggregation 37:6 ago 18:14 20:19 25:6,7 68:22 agree 19:15 agreed 4:5,11,15 170:9 agriculture 11:7 ahead 29:17 al 1:5,9 alan 130:16 131:4 131:25 132:14 136:8,14,19 146:13 alcohol 8:8 alexandra 160:25 161:19 162:3 163:3 175:23 176:2	algorithms 131:18 alleged 181:8 allow 174:7,9 allowed 168:24 allows 180:21 alpaca 11:9,15 12:5,12 alpacas 11:16 12:10 americans 111:6 amount 109:8 131:16 154:22 156:21 amounts 111:8 142:25 ample 61:9 analyses 17:11,12 17:13 27:24 28:8 32:6 35:3 42:20 62:5 68:21 88:8 88:11 89:19 96:3 97:19 102:16 125:25 145:15 159:7,10,11 170:23 171:3 177:4 180:25 192:23 analysis 12:3 13:15 15:4,9,13 16:3,24 17:3,7 19:17,19,21,22 28:5 35:2 61:7,13 61:20,25 62:19 63:2,11,13,14 66:15,22 71:13,20 72:3 82:6,7,15 84:15 85:20 86:24 87:2 88:6,10,17 89:8 93:14 95:24 96:5,6,10,11,14,20 96:21 97:8 98:8,9	98:22 99:10 100:5 104:3,20 105:3 106:21,22,23 110:6 111:18 112:4,19,24 113:3 113:5,6,15,20 114:7,11,12,21,23 115:12,16 122:19 123:19 124:6,13 124:14 129:11,12 131:17 133:24 139:21 143:9,16 149:3 154:25 160:10,17 164:18 164:25 165:4,10 165:13,14 167:5 168:24 169:4 170:18 173:14,18 173:21 174:10,19 175:2,8,10 176:21 180:5,10 181:6,21 182:10 183:17 184:16,20,22 185:7,11 188:18 188:24 189:24,25 190:4,5,18,20 191:8,14,18,24 192:13 193:6,10 193:19 194:2,4,7,9 194:16,21 195:7,8 195:17 196:12,13 196:25 197:4,12 198:7,25 199:4,10 200:2 analyst 110:24 196:2 analysts 149:15 analytical 32:15 analyze 26:23 28:2 32:25 33:6 39:24 40:21,23 41:18,21	41:25 42:4,7,17,22 43:2,5,13,24 47:25 48:3,4 analyzed 40:15 41:19 74:23 82:4 143:12 173:8,10 175:14 176:23 185:9,23 186:8 analyzing 13:21 54:12 86:22 87:6 111:22 149:16 animal 12:17 animals 12:14 annual 158:8,13 203:22 anomalous 161:10 163:8 answer 6:25 8:5 22:4 37:7,20,23 38:24 39:3 47:20 57:4 71:21 77:22 78:7,8 79:12 98:20 101:2,3 102:10 105:11 110:4 128:19 139:15 185:23 189:4 190:3 195:12 answered 46:16 47:6 141:8 184:17 185:10 188:20 189:11 190:7 197:19 201:2,3 answering 8:16 88:18 185:16 answers 6:9 8:21 93:19 206:7 anybody 30:6 31:6 31:11 52:10 aos 1:20,24
---	--	--	---

[apologize - berkowitz]

Page 4

apologize 165:16 appearance 2:2 3:2 appeared 161:11 appears 30:4 applicable 167:5 applied 11:24 apply 74:22 appreciate 201:10 approach 82:9 166:15,24 approaches 82:22 appropriate 61:11 78:5 111:14 204:7 approximate 80:6 80:10,17,19,24 81:5,9 183:12 approximately 16:22 20:19 22:19 25:13 29:4,16 38:14 52:5,22 67:2 74:19 170:11 171:9 172:11,18 176:6 183:4,15 approximation 23:22 80:3 approximations 78:6 area 14:20,25 15:5 79:15,20 181:7 areas 14:18 48:11 115:23 arrangement 170:9 article 10:17 16:24 104:14 107:25 108:6,7,12,14,17 114:15,20 119:9 120:10,14 167:2 203:20	articles 17:2,6,9 78:24 87:18 119:7 asians 85:25 111:6 aside 129:10 asked 23:5,7 26:22 27:6 31:25 32:4,5 32:20 46:23 47:13 47:22,25 48:3 103:8 168:12 172:22 173:24 178:20 184:14 185:6,19,21 188:18,20 189:2,6 189:8,22,23 190:16,25 197:18 197:21 199:23,24 asking 20:13 59:17 66:17 100:17 126:6 192:12 aspects 61:10 195:21 196:15 asserting 39:4 assess 24:7 82:13 127:11 assessing 79:20 assessments 58:23 assistants 31:13 associated 105:21 association 1:3 104:5 105:4,12,20 107:11 112:25 120:8 165:21,25 166:3 196:18 assume 6:18 40:4 98:12 110:3 129:4 129:8,23 assumed 78:4 129:25 assumes 111:3	assuming 20:10 23:14 assumptions 39:2 asterisk 131:5,6 atlanta 13:4 14:16 16:12,16 atlantic 2:24 attached 204:13 206:10 attend 117:16 attention 141:21 176:13 177:12 178:19 185:20 199:12 attorney 3:19 5:19 204:16 attorneys 7:20 audits 181:8,9,11 author 11:24 authored 68:10,12 authors 78:25 available 10:20 110:24 avenue 1:19 2:7 3:7 5:9 avoid 111:15 aware 10:13,24,25 60:24 78:13,18 113:19 114:25 180:25 awfully 66:16 ax 105:25 166:16 166:17 axis 109:24,25	115:3,4 116:11 118:6 129:2,6 141:20 163:24 164:13 172:14 195:12 background 60:25 ballet 13:24 ballpark 16:21 22:16 25:9 29:14 141:5,6 baptist 5:7 based 67:23 132:11,12 133:8 166:14 178:13 185:6 basic 166:15 basically 54:21 98:19 basis 47:15 142:7 143:2 bearing 184:22 began 13:25 15:14 28:8 149:15 behavior 54:12 believe 19:3 21:22 22:23 40:10 50:20 51:16,20 52:9 68:4,7,21 74:17 87:14 90:8 108:14 119:8 123:13 140:8 159:21 179:10 182:5 184:4 190:7 197:8 201:2,3 beneath 62:7 bera 167:12 berkowitz 160:24 161:11 162:19 163:3 175:23 176:2,5,16
---	---	--	--

[bernard - candidate]

Page 5

bernard 94:19 103:17 104:15 115:6,9,17 129:14 129:19 151:20,22 152:7,19,24 153:22 154:20 156:8 183:24 bernie 114:25 best 9:25 25:15 40:11 140:17 168:21 better 55:14 161:12 190:12,13 beyond 17:9 big 99:17 bill 28:12 33:12 35:15,16 169:16 bit 27:11 134:11 bivariate 19:22 167:11 black 16:15 44:4 44:12 46:4,14,24 46:24 55:11,12 56:17 57:11,18 58:4,16 59:11,24 60:4 62:16,19 64:2,8,13,21 65:2 75:16 81:24 82:17 83:2,9,15,22 84:8 85:15 86:5 90:17 91:2 93:6,15 94:3 94:16 95:6,10,22 96:2,15,22 97:6,23 97:25 98:9,13 102:21 103:3,12 103:20 106:5 107:18 109:7,14 110:2 111:11 112:6 115:8 116:14,22 117:23 117:24 118:14,21	119:5,16 120:2,21 123:10,20,21 124:6,7,21 126:9 126:12,21 127:7 127:25 128:4,20 129:14 135:17,24 136:7,14,16,19,21 136:24 137:6,10 139:16,17 140:17 141:7,25 142:3,4 142:10,12,14,15 142:17,19 144:9 144:13 145:6,10 147:19,23,24 149:21,21 152:6 152:11,24 153:8,9 153:14 154:13,16 154:23 155:2,6 156:19 160:23,25 161:6,7,12,16,16 161:18,21 162:14 162:22,24 164:3 176:4 183:25 185:12 186:3 187:19,25 188:10 190:20,21 191:8,9 192:15,17 193:11 194:4,14,18,22,23 195:8 197:13,15 198:7,10,20 199:10 blacks 54:24 55:3 85:23 100:25 111:7,14 113:18 123:8 128:23 130:4,6 137:2 139:18,18,19 140:25 147:17 149:11 153:20 bloc 47:3 61:20 86:20 88:12 105:6	110:6,16 112:15 127:12 128:24 139:20 167:9 blood 202:17 board 33:16 40:16 41:3,8,22 42:2,5,8 42:12,23 43:3,7 44:4,5,13,16 45:5 45:14 48:21 54:16 86:14 87:7 118:23 120:19,24 121:14 173:11 175:13 178:25 186:14,20 188:8 bockius 1:18 3:6 body 13:24 177:19 177:20 book 77:24 78:13 114:18 bottom 61:17 92:15 102:15 103:23,24 108:20 115:4 129:3,6 130:9 131:5 143:19 158:23 164:21 bound 76:2,10 boundaries 35:6,7 186:10 bounds 65:20 brain 11:18 branch 1:5 break 8:2,6 56:23 56:25 57:8 101:21 141:13 164:7 breakdown 163:2 briefly 199:20 bring 27:12 broad 2:16 26:4 52:14 66:16	broadway 3:20 budget 158:8,14 203:22 business 5:7 butler 3:10
c			
c 5:11 102:4 202:2 202:2 calabrese 2:9 calculate 76:19 77:3,12 79:23 104:23 131:9,22 134:22 calculated 77:18 129:9 130:20,24 145:19 151:20,25 152:5,10,17 154:4 calculating 109:7 calculation 174:16 calculations 172:25 call 19:13 called 5:12 50:10 51:13 67:10 73:7 82:9 107:22 126:8 calling 164:17 calls 179:24 campaign 49:9 117:15 candidate 33:16 55:2,9,10,12,13 56:3,6,16,17 57:12 57:17,19 58:5,9,18 59:12 60:5,8 62:11,17,24 63:4,8 63:16,21 64:3,9,14 64:22 69:7 75:16 85:14 92:21 97:23 97:24 98:10,14 102:22 103:4,13 103:20 107:14,19			

[candidate - clerveaux]

Page 6

109:14 110:3 117:16 125:25 126:2,4 130:19 134:15,17 135:7 141:25 142:2,8,13 142:18,20,22 143:3,4,12,22 145:21 146:10 147:2,7,19,22,24 148:4 149:5,7,9,10 149:11 150:5,6,14 150:15 151:7,10 151:11,13,22 153:8,10,14,18,19 153:23 155:7 156:13 157:2 161:16 165:24 176:7,22 185:8,13 185:14,22 186:3,4 187:25 192:15 196:7 candidates 44:5 44:12,16 46:23 47:2 48:8,17,20,24 49:2,4,17,24 51:4 55:3 59:25 89:17 89:19,22 90:5 95:10 96:23 104:7 109:13 116:15,23 117:19,23 121:4 121:20,22,24,25 122:8,10,11,13 123:9,10,11 125:12,13 126:23 127:4 128:22 129:15,20 134:16 134:24 139:18 142:2,4,6,9,11,22 143:6 146:19 148:9 154:23 155:3,18 156:23	157:6,10 159:13 163:5,15 164:4 182:8,23,25 183:14 187:20 191:17 192:17 197:15 198:11 capacity 7:21 capture 71:7 captured 71:5 carefully 204:5 carolina 113:12 case 5:20 7:10,14 17:16,20,25 18:13 18:15,18,20,23 19:4,6,9,12,13,16 20:3,4,7,10,18,23 20:25 21:3,7,12,14 21:18,21,24,25 22:9,12 23:4,7,14 27:15 28:13,18,24 29:3 32:2 38:3 66:18 87:12 99:12 99:21 109:21 111:17 113:12,19 140:9 143:2,2 165:22 168:22 169:21 170:13 189:20 cases 19:25 22:17 22:20 23:10,17,20 23:24 25:11 26:13 66:21,24 109:4 149:13,15 171:10 171:22 172:12,19 189:14 cast 69:5,6,24 104:7 107:13,19 categories 85:19 96:16 112:5,11 113:16,24 141:11 167:4	category 70:5,10 70:13,19 127:21 cause 111:7 caused 117:24 160:10,18 center 16:12 centered 39:18 central 1:8 3:4 5:20 27:21 40:17 170:2 175:12 178:25 188:15 certain 192:15 certainly 17:8 186:21 certification 4:8 certify 202:8,15 206:5 chajmovicz 162:17 challenges 180:15 chance 180:23 change 10:4,9,11 10:15 61:6,12 138:25 142:8 143:8 185:2 205:5 changes 10:23 143:16 204:12 206:9 characterization 110:10 characterize 176:8 176:15 characterized 161:24 charles 94:20 103:17 115:6,9,17 117:15 129:14,19 130:15 131:2,22 132:12,17 133:10 133:14 135:25 151:20,22 152:7	152:19,24 153:23 154:20 156:8 179:16,22 182:23 183:2,14,24 check 114:22 chevon 162:23 choice 128:23 139:18 147:3,13 147:13,15,18,20 150:2 151:2,5,7,11 151:12 153:14,20 153:23 155:16 church 5:8 circles 56:8 circumstances 86:14 110:22 citation 141:24 cited 88:21 107:25 108:7,14 125:7 203:20 citing 104:13 citizen 69:20 111:23 137:3 city 18:16 21:19 21:20 civil 2:15 7:19 clarify 7:9 18:2 20:6 23:6 45:4 88:22 104:22 170:5 199:18 clarity 165:12,17 class 16:17,18,21 classes 15:19,24 16:2,4,8,11 clean 30:9,13 clear 49:12 58:19 159:11 164:17 201:5 clearer 166:22 clerveaux 94:7,13 94:17
--	---	--	---

[close - concluded]

Page 7

close 177:25 185:20 clr 1:20,24 coalescing 188:11 coalition 46:24 188:10 coauthors 12:4 coefficient 99:17 104:24 110:5,15 192:6 193:24 194:8 196:2,5,17 197:6,7 coefficients 105:9 cohesion 55:25 56:3,7,13 106:5 138:22 139:16,17 162:11 176:20 182:25 187:24 194:7 cohesive 46:5,8,14 161:20,20 cole 1:17 2:5,14 5:5,23,24 6:1,3 7:1 8:1 9:1,6,7,8 9:16,18,21 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1 18:1 19:1 20:1 21:1 22:1 23:1 24:1 25:1 26:1 27:1 28:1 29:1,19,20,22,25 30:1,17,23 31:1 32:1 33:1 34:1 35:1 36:1 37:1 38:1 39:1 40:1,25 41:1 42:1 43:1 44:1 45:1 46:1 47:1 48:1 49:1 50:1 51:1 52:1 53:1 54:1 55:1	56:1 57:1 58:1 59:1 60:1 61:1,16 62:1 63:1 64:1 65:1 66:1 67:1 68:1 69:1 70:1 71:1 72:1 73:1 74:1 75:1 76:1 77:1 78:1 79:1 80:1 81:1 82:1 83:1 84:1 85:1 86:1 87:1 88:1 89:1 90:1 91:1 92:1 93:1 94:1 95:1 96:1 97:1 98:1 99:1 100:1 101:1 102:1,14 103:1 104:1 105:1 106:1 107:1 108:1 108:6,7 109:1 110:1 111:1 112:1 113:1 114:1 115:1 116:1 117:1 118:1 119:1 120:1 121:1 122:1 123:1 124:1 125:1 126:1 127:1 128:1 129:1 130:1 131:1 132:1 133:1 134:1 135:1 136:1 137:1 138:1 139:1 140:1 141:1 142:1 143:1 144:1 145:1 146:1 147:1 148:1 149:1 150:1 151:1 152:1 153:1 154:1 155:1 156:1 157:1 158:1,7,8,13 159:1 160:1 161:1 162:1 163:1 164:1 165:1 166:1 167:1 168:1 168:10 169:1 170:1 171:1 172:1	173:1 174:1 175:1 176:1 177:1 178:1 179:1 180:1 181:1 182:1 183:1 184:1 185:1 186:1 187:1 188:1 189:1 190:1 191:1 192:1 193:1 194:1 195:1 196:1 197:1 198:1 199:1 200:1 201:1,13 202:9 203:4,14,15 203:16,18,19,20 203:22 204:2 205:2 206:2 collect 188:22 199:24 collected 86:19 87:22 184:23 collecting 86:22 87:6,10 collection 12:3 colleges 16:15 color 121:21 122:8 colored 1:4 columbia 15:16 column 62:9,12,15 62:16,17,22,25 63:6,12,18,23 64:19 86:9 92:20 130:20 135:14 144:8,17 148:11 152:6 158:19 159:20 columns 75:20,21 combines 65:19 come 63:23 77:25 80:3 93:18 coming 8:9,12 commissioner 3:17 168:17	communication 12:4 37:24 communications 37:17,19 38:5,9,13 38:21,23 39:5,16 39:18 community 89:22 90:14,17 91:6,10 91:18,24 92:9 117:17 121:6 125:8 128:3 157:12 161:25 179:22 180:8,12 compare 93:13,15 167:21 compared 34:5 97:19 completeness 157:17 composition 104:5 105:13,19 107:12 113:2 114:4 117:11 165:23 177:18 178:3,14 192:8 196:19 compositions 111:21 compost 11:10 composted 12:12 12:18,20 comprised 34:21 computer 71:9 concept 75:23 concerned 12:11 concerning 119:7 conclude 26:25 55:7 59:20 143:3 concluded 22:24 25:16 115:12 188:4,7
--	---	--	--

[concludes - correct]

Page 8

concludes 201:8 conclusion 54:7 64:12,20 117:8 121:12 122:25 140:3 147:8 conclusions 138:20,25 139:5,7 139:10,13 188:14 conditions 112:9 conducted 14:8 174:11 181:11 conducting 48:6 confidence 75:23 75:25 76:2,4,6,8 76:14,19,24 77:4 77:14,18,20,25 78:4,20,22 79:4,5 79:9,10,19,21,23 80:4,6,10,14,17,20 80:24 81:6,9,12,13 81:15 83:25 97:6 97:9,15 98:17 134:22 135:3,5,10 135:12 138:10 157:23 172:23 173:3,25 174:2,6 175:10 181:15 183:19,23 187:5 189:14,18 confident 77:7,10 81:16,18,19,22 82:15,25 83:8,14 83:21 84:2,9,13 85:6 89:4 92:21 92:25 93:5,10,20 93:25 94:6,11,15 94:20,24 95:4,19 133:12,16,20 135:20 136:3,10 144:5,25 145:24 146:7 148:15,19	148:24 152:14 154:7 160:4 163:20 164:2 199:14 confidential 203:12 confirm 197:2 conflating 125:22 conflict 173:13,17 173:20 177:7 190:5,8 conflicted 189:25 confused 195:15 connect 128:12 connected 125:11 connection 23:24 126:20,22 connell 3:22 168:4 consider 47:13 55:4 60:22 66:9 90:10 115:19 119:19 147:6 160:8 considered 56:9 115:22,25 127:23 consistency 126:10 127:11 consistent 34:9 93:14,17 95:23 96:2 97:20 126:14 126:16 154:22 160:21 182:24 190:14 193:7,24 194:8 195:2 198:21 consists 124:19 consortium 16:14 consultant 24:6,13 25:3,10,24 26:6,13 39:11	consultation 15:6 consultations 13:10 consulting 170:6,8 cont 61:19 cont'd 3:2 102:6 184:10 199:21 contained 169:23 contest 41:20 54:22 55:22 56:4 57:13 58:21 59:10 63:21 87:13 119:8 142:2,11 147:11 147:16,18,21 149:4 150:23 161:17 162:13 163:12 175:15,17 175:22,25 187:22 contested 54:9,14 173:8,10 176:23 contests 42:15,20 43:16 52:4 86:15 87:7 121:14 142:5 142:17 149:16,19 150:21,22 173:15 173:18,22 175:11 185:17 187:17 context 24:13 47:19 60:24 61:6 66:4 86:19 89:13 123:15 126:14 127:11 contextual 61:11 continue 30:7 continued 15:15 continues 113:4 continuing 12:22 13:25 14:6 continuum 56:3 contradicted 179:14,20	contrary 117:4 contribute 121:11 122:24 conundrum 199:9 cooper 33:12 35:15,16 169:16 copies 30:13 copy 108:12 158:13 corado 64:9 75:17 117:15 129:13,18 179:17,23 182:23 183:2,14,23 corey 2:9 corey.calabrese 2:10 correct 7:11,12,15 7:16,23 10:8 12:23,24 14:2,6,7 28:13,14 30:23,24 41:3,17 42:15,16 46:5,6,8,9,17,18 47:4,5 61:22,23 62:3,4 64:10,11,15 67:16 72:3,4 77:2 77:17 80:11,18 81:4 85:4,5,16 92:23,24 93:8,9 94:4 98:10 102:17 102:18 104:17,18 111:17 112:2,3,6,7 114:10 115:9,10 115:14 125:20 129:15,16,20,21 129:24 130:16,17 130:22,23 131:2,3 135:7,18,19,25 136:2 138:2,11,12 138:14 143:23,24 144:3,4,10,11,14 144:15,19,20,23
--	--	---	--

[correct - de]

Page 9

144:24 145:22,23 146:5,6 148:13,14 151:23,24 152:3,4 152:8,9,12,13,19 152:20,22,23,25 153:2,4,24,25 154:14,24,25 156:10,11,15,23 156:24 157:14,20 157:21,24,25 158:4,5 159:3,15 159:19 167:24 172:12,19,20 173:9,11,12 176:24 177:4,5 178:21 179:2,3 180:16,17 185:25 186:6,10,11 189:21 193:14 200:4 206:6 corrections 204:5 204:8 206:9 correctly 74:17 172:25 173:6 174:11 193:9 correlated 111:13 114:3 correlation 82:6 93:14 96:3,5,10,14 96:20 97:7,19 98:8,22 99:9,17 100:23 102:16 104:3,24 105:3,8 105:18 106:11,13 106:17,23 110:5 110:15 111:18 112:4,19,24 113:15,20 114:2,7 114:11,12,21 115:11,16,18,24 115:25 116:3	123:18 124:5,14 129:11 164:18 165:12,21,24 166:8,22,23 173:14,18,21 180:10 189:25 190:5,17 191:8,14 191:23 192:6,13 193:10,19,23 194:8,16,21 195:7 195:17,25 196:5 196:11,17,25 197:6,7,11 198:6 199:4 correlational 19:22 88:9,24 93:16 95:24 122:18 123:6 193:6 198:21 correlations 84:3 107:21 115:21,22 193:15 coterminous 35:7 council 43:9 counsel 2:2 3:2 4:6 6:23 7:4,6,22 31:10,11 33:11,19 37:20 38:6,24 40:5 43:12 108:13 119:9,11 168:12 173:24 199:23 count 23:21 86:8 countered 120:19 counts 158:23 county 20:16 34:14 43:4 119:25 202:5 couple 108:22 course 128:18 141:17 151:17	court 1:2 4:19 5:2 18:7 19:2 20:9,22 21:9 60:25 90:10 189:19 204:20 courtroom 6:12 covariance 166:8 create 76:10 credibility 179:6 credible 118:21 119:4 120:20 credit 124:20 crediting 96:19 critiques 167:8 critiquing 17:12 cross 149:14 crossover 106:4 138:22 currently 8:14 15:22,23 curriculum 9:7 203:15 cut 179:25 cv 1:7 9:23 10:2,7 10:12,23 23:21 26:12 cvap 69:15,20,25 107:18 167:3	35:12 36:3,7,9,11 36:13,17 37:2,5,11 37:14,21,25 38:18 38:25 39:24 40:9 42:22 43:3,6,10,11 43:13,19,20,22 52:25 53:3,5 61:9 70:8,11 71:11,18 71:23,25 75:11 80:4 82:19 84:4 84:12,19,22,24,25 85:3,21 87:11,24 95:17,18 98:4 99:14 107:2,3 110:23,25 111:3 111:19,25 112:10 113:9,13,23 134:20 139:2 142:7 149:13 159:6 167:22 168:20 169:2,7,8 169:12,18,21,23 170:2 171:2 177:17,23 182:14 184:15,23 188:21 188:23 189:6 199:24 200:4 date 9:10 10:2,10 29:23 108:10 158:11 204:10 206:14 dated 9:8 10:3 203:16 daubert 172:7 180:15 david 3:10 david.butler 3:13 day 201:16 202:21 days 204:16 de 5:9
		d	
		d 5:11 68:6 88:2 102:4 203:2 d.c. 2:25 3:8 dance 13:3,5,9,19 13:22 14:9 dancers 13:24 dancing 13:22 data 12:3,3 15:4 27:25 28:3 32:11 32:19,22,24 33:2,5 33:9,10,20,22,24 34:2,5,8,9,11,12 34:18,19,25 35:8	

[deal - dozen]

Page 10

deal 17:2	15:7 53:2	devoted 54:4	distinction 105:15
dealing 110:17	depends 79:13,14	difference 97:21	105:16
deals 87:23	79:15 99:11,13	163:13	distribution 78:3
decatur 5:10	deponent 206:3	differences 109:6	99:13 111:12
18:16 19:13,16	deposed 6:3 19:4	109:12	district 1:2,2,9 3:5
20:3 21:14,18,19	deposing 204:15	different 34:21	5:20 7:7 21:6,8
21:20,21,23,25	deposition 1:16	35:4 58:2,25	27:22 34:22 35:20
22:8	4:9,16 8:2 9:3,12	59:25 63:7 84:14	35:22 36:8,14
december 9:9 10:3	30:7 201:9 202:10	95:8,13,14 107:6,7	39:19 40:17 43:17
10:5,19 203:17	202:12 204:4,13	110:9 148:7 151:3	43:18 46:4,25
decided 21:9	204:17,18	162:18 163:2,10	48:8,16 51:17
149:14	depression 10:17	166:4,7 190:6,8	85:19 88:15
decision 124:20	describe 190:13	191:17 195:6,16	117:18 168:16,19
decisions 117:14	described 37:7	195:19,21,23	170:2 175:12,19
deemed 204:19	55:16 56:12	196:12,15,21,21	178:25 184:19
defeated 47:2	104:20 109:20	197:20	185:17 187:17
128:23 139:19	describing 98:22	differently 54:22	188:15
defendant 3:4,17	design 14:19,22	197:19	district's 33:11
5:19 21:21	designations 35:20	dimension 89:21	50:2 89:7
defendants 1:10	designed 11:25	direct 87:25	districts 34:20
168:22	167:23	141:21	35:14 36:11 186:9
define 168:13	designing 13:13	directional 79:18	187:21
defined 54:21	13:14 15:2,3	directions 203:7	divided 70:2,3
definition 59:18	despite 162:8	disbelieve 120:4	123:5 128:2 166:9
60:21	163:4	discipline 14:24	document 9:6,15
degradation 12:19	determination	discovery 168:16	9:16,17,20 11:3
degree 54:10,19	142:4,12,19	168:18 184:18	12:16 29:24 30:3
99:4,9,25 100:8	determine 35:9	discrepancy 97:4	30:5,16,21 61:16
101:19 192:14	131:24 147:8	discuss 59:4	74:7 102:13 158:7
degrees 57:25	determined 24:11	discussed 122:22	164:19
demands 181:14	76:7,9 77:19	124:23 153:12	documents 168:23
demographer	80:13 146:13	167:2	199:25 200:4
35:14	developed 65:18	discusses 37:21	doing 28:8 82:10
demographic	114:8,9,11,17	38:25 77:24	106:8,22 204:9
52:25	developing 13:14	discussion 92:13	doramectin 11:9
demonstrate	167:11	disorders 10:19	11:14,20
120:25	developments	disparate 84:12	dos 67:23 162:23
denominators	104:15	97:6 162:8	downloaded 68:5
111:2,9	deviations 166:10	disqualified 172:6	dozen 38:14 67:2
department 13:3,8	devised 132:9	disregard 159:20	171:9,22
13:11 14:9,15			

[dr - endorsement]

Page 11

dr 5:24 6:3 168:10	72:2,7 78:15	131:17 133:3	164:4 169:21,23
draft 18:22 31:3	86:24,25 88:5,9,16	134:4,20 140:7	175:9,11,21 176:7
drafting 29:9	88:22 89:8 96:6	159:12 160:4	176:23 181:22,25
drawing 126:20	96:10,21 97:10	163:25 167:23	182:20 185:9,12
drawn 105:17	98:8,15 114:9,16	172:23,24 173:4,5	185:22 186:3,8,8
159:18	114:22 115:7	173:13,17,20	186:18,24 187:7
drink 8:8	116:5 140:11	174:10 180:5	187:12 188:9
drug 12:16,19	143:9,16 165:6,9	183:19 184:22	189:23 193:10
duly 5:12 202:11	166:5,20 167:6,12	189:24 190:4,20	197:12,16 198:7
dynamic 148:7	167:17 171:8,24	191:9,18,25 192:9	198:11
151:3	175:2 184:16,19	192:16 193:8,20	elections 22:9,13
e	196:13 197:3	194:9,12,14,17,23	22:21,25 23:12
e 5:9,11,11,11	economic 88:5	195:7,18 196:20	40:16,20 41:3,8,22
51:14 88:2 102:2	ed 178:20,23 179:6	198:9,20,25 199:9	42:12,12,18,24
102:2,4,4,4 167:12	179:14,20	199:12	43:3,7,9 44:21
202:2,2 203:2	editor 119:2,4,21	eisenbach 146:11	45:2,14 48:21
205:3	119:24 121:9,10	148:23	54:9,15,16 61:19
earlier 51:8 76:13	educating 54:5	either 6:15 111:18	74:16 88:6 102:17
168:12 169:24	education 11:8	199:6	126:18 127:4
170:3 171:5	44:13,17 53:2	elected 44:5,12,16	141:20 143:11,14
177:22 181:20	118:9 175:13	election 34:20	148:10 149:18
182:13 190:16	179:2	35:13,20 36:8,11	156:18 173:9,11
east 1:8 3:4 5:20	educational 87:23	36:14 39:19,23	176:14 183:8
11:16 27:21 33:16	effect 4:18 13:21	40:2,4,9,12,16	186:14,20 187:9
40:17 41:2,22	13:23 99:18	42:2,5,8,14,22,22	187:10 188:8,15
42:2,5,8 44:3,21	193:14	43:2,20 56:14	190:19
45:2,13 48:20	ei 61:20,21 62:11	57:9 58:5,20 59:9	electoral 175:16
50:11 52:13,16,20	62:17,24 64:3	59:21,23 60:2	electorate 123:6
53:8,22 91:11	69:3,10 72:22	61:5 74:9 75:14	187:16
118:9 120:22	73:6 75:21 77:12	79:25 80:7,11,18	element 163:14
126:9 169:25	80:13 82:6,15	80:25 82:18 84:20	elia 3:17
175:12 178:24	83:23 84:15 85:3	85:7 87:16 89:5,9	eliah 145:17
186:9 187:21	85:7,14 88:21,24	92:15 115:5	emory 13:3 14:10
188:8,14	89:3,5 92:21	119:18,23 129:22	14:15 15:17
easy 67:15	95:25 97:15,20	130:9 136:25	endogenous
ecological 19:22	98:19 114:25	137:7,11,15,25	187:10
19:23 61:22 62:2	116:13,25 117:5	138:6,7,9,14,17	endorsed 121:23
62:13,18 63:2	121:13,14 122:15	142:7 150:10	122:10 126:17
64:25 65:7,10,17	123:2,21 124:12	154:3 157:16,19	161:23
66:3,11,15,22 67:4	129:8,12,24 130:2	157:22 158:2	endorsement
70:17 71:13,20	130:11,19 131:8	160:2,6,11,19	126:7 127:6,22

[endorsements - examples]

Page 12

endorsements 117:12 124:24 125:2,11,22 engel 162:17 engle 162:22 enrollment 53:6 entitled 62:16 entries 28:17 29:6 entry 11:5,12 13:2 13:5 environment 89:13 equally 167:4 equals 105:25 166:16,17 equation 106:2 109:10,20 110:8 110:13 132:15 165:5,9,13 166:5 166:17,19 167:6 167:10,17,20 ercsd 204:1 205:1 206:1 eric 3:19 161:8,22 162:5 errata 204:7,9,12 204:15 206:11 error 73:8,8 76:9 76:12,18 83:24 111:15 159:17,22 171:6 174:2,4,5,7 174:9,15,18,24 175:6 189:9,12 errors 73:23,25 74:4,8,15,22 77:9 77:16,24 78:21 79:2 80:12,21 109:9 110:22 112:20 135:8 145:14 169:17 171:13,16	esq 2:9,18 3:9,10 3:11,22 essentially 198:12 establish 34:20 97:15 180:20 established 97:13 98:5 142:6 estimate 29:13 35:21 64:24 65:5 69:4 70:12 73:10 74:5 75:2,5,8,9,9 75:11,17 76:3,11 77:13 80:22 81:23 82:16 83:8 84:7 84:10,11 85:3 92:22 93:2,6,11,21 93:25 94:2,6,12,16 94:20,25 95:5 103:2,11,19 106:5 111:20 116:4 121:13 123:2,21 124:7 129:9 130:20 131:10 132:8,11,21 133:4 133:13,17 134:21 135:16,21,23 136:4,6,11,14 137:10 138:14,16 138:19 140:5,14 140:19 145:25 146:8,17 148:16 148:20,24 159:22 186:23,23 191:9 191:25 192:16 193:12,21 194:13 194:18,23 195:18 197:14 198:10 estimated 97:25 115:7 143:20,25 144:8,12,17,21 146:3 148:11	160:23 161:5 estimates 29:14 62:12 65:6,23 69:10 70:18 72:8 72:22,25 73:5,12 73:17,25 74:9,25 75:20 76:20,25 77:8,11,21 78:2 79:24 80:7,15,18 80:25 82:21 83:12 85:7 86:20 88:13 89:5 93:15 95:20 95:23,25,25 96:14 96:22 97:9 105:6 106:16 109:8 110:7,17 111:8 112:12,16 121:14 123:4 127:12 133:21 134:4,23 135:5 137:13,15 138:23 139:3,4,9 139:12,22,25 140:21 144:6 145:2,5 146:19 152:15 155:10 158:3 159:12 160:5,5 163:25 167:9,21,24,25 171:9,19 172:23 173:4,5 176:19 186:25 187:6 189:11,15 190:22 192:10 193:8 196:22 estimating 95:9 et 1:5,9 eustache 94:7,13 94:17 evaluating 132:16 everybody 85:22 85:23,24 103:25	108:21 110:20 141:23 142:24 evidence 86:13,17 86:18,23 87:7,10 87:16,20,22 88:4 93:16 97:17 116:21,24 117:4,7 117:17 119:4,16 120:2,21 121:2,8 121:13,21 122:9 122:15,16,18,19 122:20,22,25 123:6 124:19 125:4 126:12 127:7,10,24 128:2 128:11 129:11 130:2 160:9,17 177:7 181:25 182:3,6 184:25 194:10 195:9 exact 75:3 78:4 109:8 examination 5:15 102:6 168:8 184:10 199:21 203:3 examine 24:6 examined 5:13 80:21 example 13:20 52:3 55:2,6,20,23 56:6 57:14,14,23 58:3,7,11,21 59:4 59:5 60:7,9 61:6 61:15 107:17 115:6 123:8 142:21 150:24 162:13,21 191:15 examples 79:17 125:8
---	---	--	--

[excellent - formula]

Page 13

excellent 174:23 excluded 180:14 excludes 155:2 exclusive 123:23 124:8,11,15 exhibit 9:6,7,12,13 9:17,18,21 29:18 29:19,20,25 30:10 30:13,15,17 35:24 40:25 54:9 61:16 102:14 108:6,7 158:7,8,12 164:20 203:15,18,20,22 exhibits 203:13,25 exit 167:23 exogenous 187:9 expand 26:2 175:15 expanded 15:16 expectations 98:5 expected 98:2,3 experience 11:4 experienced 12:10 experiments 13:14 expert 7:10 12:5 17:15,19,24 18:3,4 18:12 19:24 20:5 20:14,18 22:17,25 23:11,23 27:14 29:21 30:22 31:16 31:17,21 33:12 65:9,11 66:2,5,7,8 66:10,12 101:11 102:14 108:8 168:14 170:4,6,7 170:12 172:7,11 172:18 180:7 203:18,21 expertise 12:8 15:6	explain 24:3 60:19 124:10 199:15 explained 134:9 explore 27:20,23 explored 48:7,8,13 extends 164:22 extent 37:19,21 38:23,25 extreme 54:10,18 eye 2:24 ezi 67:11,12,18,22 68:3 171:6,18 f f 102:2 202:2 fact 82:22 83:21 117:23 127:13,14 150:25 155:2 163:4 179:4 factor 124:22 147:7 factors 151:16 163:18 facts 37:21 38:25 193:7,22,24 factual 86:19 89:13 123:15 126:14,15 127:11 fail 204:18 fair 36:16 44:24 110:10 138:4 194:19,24 fairly 132:20 faith 91:17 familiar 75:4,22 familiarize 9:15 30:3 far 28:24 109:17 158:19 160:3 164:15 farm 12:9	farmers 12:12 farms 12:13 favor 21:9 favorable 89:18 favoring 51:5 52:8 february 1:12 27:17,19 28:2,6,9 28:21 170:4 202:22 federal 20:8 21:6,8 feel 77:10 felt 42:11 43:16 81:14 83:4 119:21 179:11 182:8 female 13:24 field 14:17 17:13 fields 154:11,16 155:13,19 figure 25:9 61:4 85:19 106:3 figures 75:19 file 71:8 74:12 filed 19:2 20:11,13 23:15,25 25:12 66:24 189:19 filing 4:7 final 31:24 32:13 32:17 54:7 63:18 116:12 128:25 find 24:9 25:25 58:15 82:20 86:23 98:18 119:15 147:10 169:17 finding 150:8 findings 97:6 fine 8:3 30:11 128:6 finish 8:4 finished 88:18 90:8 101:2	firm 7:14 first 9:11 11:2,5 14:5,21 45:18 46:2,3 54:13 62:9 78:12 106:9 114:10 156:18 159:5 160:22 162:10 fit 97:13,25 five 42:11 68:22 74:19 142:24 164:7 180:2 florida 26:18,20 27:2 focus 71:2 138:23 focused 45:24 focuses 15:2 folks 91:16 follow 87:4 104:2 108:22 110:21 141:23 followed 67:15 109:16 following 55:5 follows 5:14 102:5 footnote 104:10,10 108:2,8,15 109:15 110:19 112:8 120:11,14 141:22 203:21 force 4:18 foregoing 206:5 form 4:12 5:24 33:6 48:19 105:25 113:5 206:9 formal 15:8,12 16:2,4,8 97:3 formed 45:20 former 33:15 formula 166:7,8 166:11,16,16
---	---	--	---

[forrest - grossman]

Page 14

forrest 94:22 95:2 95:6 forth 202:11 forum 117:16 179:17 forward 17:13 foskew 152:2,12 152:22 153:3,13 153:19 155:10,19 found 25:3 28:4 91:21 145:15 four 41:2,5 55:16 142:24 fraud 181:8,8 freilich 162:25 176:17 fremont 20:16 21:12 22:12 friedman 64:4 92:19 102:22 103:8 front 13:22 full 5:3,21 fully 8:16 10:2 function 69:15,16 99:19 furnished 203:9 further 4:11,15 32:4 78:14 118:6 125:8 168:2,24 169:2,3 184:7 199:16 202:15 futile 182:9	105:12 131:19 138:24 140:23,24 generally 49:24 51:4 generate 65:4,23 69:3 70:18 73:7 76:13 77:15 80:5 80:9,16,19,24 81:5 99:16 107:7,21 112:15 133:4 135:4 136:13 137:12,14 138:10 140:4 157:23 158:3 159:12 165:12 174:5 186:23 187:5 191:14 193:11 195:18 generated 65:6 72:9,23,25 75:10 79:2 88:12 91:22 97:9 98:14 116:4 124:7 132:5 135:3 135:8,16,23 136:6 137:16,17 145:15 160:6 164:2 165:17 182:19 187:2 189:10 193:21 194:13 generates 89:13 171:6,19 generating 77:14 165:20 167:9 189:10 georgia 5:10 13:4 14:16 germain 81:23 82:16,25 83:9,14 83:21 84:9 117:14 129:13,18 154:3,5 154:13,22 155:6	156:8 179:16,22 182:23 183:2,14 183:24 getting 79:3 127:19 134:5 gingles 113:4,8,14 149:14 give 8:21 60:18 79:17 86:19 96:9 142:21 given 6:10 32:4 60:7 61:9 77:9 78:3 80:2 82:19 83:23 84:3,3,11 117:10 132:9 133:4 138:25 142:8 145:14 178:3 202:13 206:7 gives 56:2,5 76:4 147:12 giving 59:3 96:13 96:16 go 17:9 29:17 30:8 30:12 92:7,11 118:5 154:2 164:13 191:5 going 9:5 20:6 24:16 32:3 44:9 64:17 77:22 78:6 78:8 79:12 82:23 84:5 97:16 109:22 109:23 118:5 124:10 141:14 158:6 170:14 174:21 195:14 196:12 good 5:17 7:24 8:24 56:20 114:14 116:10 141:13 159:24 164:10,11	168:10,11 goodman 165:5,8 165:13 166:5,19 166:23 167:6,16 167:19 goodman's 107:22 goodwin 161:8,22 162:5 graduate 15:16,17 grant 11:8,25 graph 109:23 great 157:9 greater 56:10 101:18 178:16 186:13,19,21 grofman 104:15 114:25 167:2 grossman 2:18 14:4 19:8 22:2 27:16 30:11 33:3 36:20 37:18 38:22 39:7,10,17 40:22 41:4 45:22 47:14 47:17 52:17,21 56:20 57:20 64:16 64:23 67:14,18 71:15 82:2 92:12 95:12 100:20 101:14 115:15 122:6 123:25 134:8 140:15 141:12,16 160:12 161:5,7,13,14 162:16 164:9,11 168:6,9 176:16 183:11 184:6 188:5 189:4 197:5 197:17 199:13,18 199:22 201:7 203:5
g			
gardens 12:13 gary 65:7 68:13,14 73:6 77:23 80:2 97:11 114:18 gears 27:11 general 3:19 23:18 24:10 58:11			

[ground - indicates]

Page 15

ground 6:7 193:7 193:22,25 group 49:4 56:2,4 109:9 111:5 126:4 148:5 groups 48:17 49:3 49:15 50:9 58:8 60:7 111:10 121:3 125:23 180:8,12 guess 24:17,21 66:6 guesstimate 170:15 guidance 80:2	heard 53:18 hebrew 54:5 heights 5:8 held 1:17 49:9 help 137:13 helpful 55:6 177:10 hereinbefore 202:11 hereto 4:7 hereunto 202:21 high 99:2,7,23 100:6,13,18 101:6 101:9,12,16 161:15 176:20 182:25 187:15 higher 140:24 141:3,10,10 145:7 176:3 187:19 highest 142:23 highlighting 30:19 highlights 30:4 highly 188:16 hispanic 62:19 63:3,15 64:2,8,13 64:21 65:2 75:15 81:24 83:15 84:8 85:14,15 93:21 94:3,25 95:5,21 102:21 103:3,12 103:19 111:6 126:12 128:23 historically 16:15 hold 65:25 194:3 home 182:5 homogenous 19:21 63:10,13 82:7 88:10 122:19 183:5 193:25 194:4,9	hour 28:12,15 141:14,15 hours 28:23 29:2,8 29:11 hpa 61:20 63:8,9 88:25 97:20 176:13,21 182:21 183:17,21 hum 198:15 hundred 134:6,11 134:12 183:16 hypothesis 79:18 hypothetical 59:9	incomplete 31:22 inconclusive 83:5 83:7,13,17 98:19 195:10 inconsistency 184:5 inconsistent 111:2 111:9 191:24 192:23 193:4,20 194:17,23 195:4 197:14 198:8,9,14 198:17,19 199:11 incorrect 98:15,16 increase 105:22 123:7,10 increased 50:2 increases 105:22 123:8 increasing 191:16 192:14 independent 110:25 111:25 112:21 113:10,21 167:3 independently 36:3,18,25 132:6 132:16 133:25 194:14 indeterminate 131:6,19 146:12 146:15,17 index 73:9 indicate 31:21 83:24 89:19 123:4 151:15 162:11 179:12 181:13 182:21 187:18 indicated 116:14 177:23 indicates 121:21 122:9 187:15	
h	h 5:11 102:4 half 25:18,19 26:17 38:14 hand 87:13 125:24 202:21 handed 158:13 happened 131:11 132:25 133:22 134:17 happening 180:22 harry 161:4,6,12 161:14 hasidic 91:10,13 91:19,25 92:6,10 hate 195:14 hatton 117:22 118:4,5,8,10,12,14 118:17,20 120:19 121:9 122:23 178:21 179:15 hatton's 117:13 124:20 179:5,21 head 74:5 130:14 130:14 141:25,25 142:5,5	i	identical 111:5 identification 9:10 29:23 108:9 158:11 identified 118:24 166:25 identify 29:5 165:5 illness 8:15 illogical 100:9 image 13:24 imperative 204:14 implausible 179:24 importance 109:11 179:12 important 90:9 109:6 improve 49:18 inaccurate 166:20 166:21 inadvertently 111:3 include 85:25 included 43:17 120:7,17	

[indication - king's]

Page 16

indication 142:14 188:16 192:10 indicative 147:25 150:18 162:11 176:19 indicator 191:15 indigenous 149:19 individual 167:22 inference 19:23 61:22 62:2,13,19 63:2 64:25 65:8 65:10,17 66:3,11 66:15,22 67:4 70:17 71:13,20 72:2,7 78:15 86:24 87:2 88:5,9 88:16,23 89:8 96:6,11,21 97:10 98:9,15 114:9,16 114:23 115:7 116:5 140:11 143:9,16 171:9,24 175:2 184:16,20 196:13 197:3 influence 97:8 140:3 184:19 influenced 184:21 inform 149:20 168:24 169:3 182:10 183:18 196:2,22 information 38:17 58:23 61:12 69:2 69:10,12 70:4,9 71:4,5 82:12 87:25 89:11,12 90:9 93:12 97:14 118:21 120:25 121:4 123:14,16 131:9,13 169:3 203:6	informed 89:11 injected 11:19 input 69:3,12 inputs 110:9,11,12 110:14 inquiry 48:12 71:3 79:16 instance 24:24 25:21,24 26:11 instances 26:7 institution 49:13 instruction 6:25 instructions 204:3 insufficient 134:20 intentional 190:10 interest 75:13 interested 89:3 202:18 interesting 65:12 146:22 150:7 151:9 interests 49:5 89:23 90:6 91:5 157:7 interracial 147:10 147:12,21 149:3 149:19,24 150:21 163:12 175:16 interrupt 127:18 interval 75:23,25 76:2,6,8 77:14,18 77:25 79:19 80:4 83:25 181:16 187:6 intervals 76:14,20 76:24 77:4 78:5 78:20,22 79:4,22 79:24 80:6,10,17 80:20,24 81:6,9,12 81:14 134:23 135:3,5,10,13	138:10 157:23 173:25 174:3,6 189:14,18 introduced 109:9 invariably 89:24 123:13 125:11 invested 90:2 investigate 44:20 45:12 investigator 11:6 11:13,22,23 investment 50:2 178:6,17 invited 16:2 involve 109:5 involved 166:2 175:16 involving 17:20 122:23 150:23 irrelevant 139:25 140:2 isolation 121:5 issue 39:20 48:7 48:20 125:24 issued 168:14 issues 11:19	job 1:25 60:18 61:3 joe 162:25 jones 130:16 131:4 131:14,25 132:11 132:15 133:5 134:2 136:8,15,19 146:14 journal 10:18 journalistic 97:17 97:18 juan 145:21 146:23 148:13 june 170:15 jurisdiction 24:6 26:9,22 43:22 185:15 jurisdictions 44:2
			k
			k 120:9 kalman 120:8 keep 51:17 59:5 195:14 keeping 31:18 keith 130:16 131:4 131:25 132:15 136:8,14,19 146:14 kim 152:2,11,22 153:3,13,19 155:10 kind 50:6 58:25 87:21 90:9 105:2 123:14 162:15 kinds 37:25 49:10 82:19 88:7 121:5 125:24 196:21 king 68:13,15 97:11 132:9 king's 65:7,10,16 66:2,10 67:4 73:6

[king's - looking]

Page 17

77:13,23 78:13 80:2 114:18 140:7 know 18:25 19:6,9 19:14 21:3,5 24:20 28:23 29:8 33:18 34:2 35:3 37:4 38:4 40:2 44:4,11,15 50:12 50:14,21 51:15,21 52:12,15,19,22,24 53:7,21 59:15 67:12,24 68:8,10 71:21 73:24 74:4 75:5 79:6 113:8 113:14 118:12 126:19 128:7 133:3 134:18,19 136:23 137:2,5 150:25 153:16,17 153:19,20,22 158:18 169:11 185:20 198:23 knowing 12:13 knowledge 9:25 40:11 168:21 known 167:21	latino 44:15 46:14 46:25 62:10 85:13 86:4 90:18 92:20 92:22 93:2,12 94:8,21 95:15,20 95:25 97:22 101:5 112:6 116:22 117:24 118:17,22 119:5,17 120:21 123:11 124:21 130:19,21,25 132:23 133:13,17 133:23 134:14,16 134:24 135:6 136:15,17 139:17 140:25 143:21,22 144:2 145:20 146:4,11,14,22,24 149:5,6 150:4,5 151:11,21 152:2 156:21 162:24 188:11 latinos 85:22 100:23 130:3,6 139:19 147:3 149:11 153:20	left 102:10 164:8 legal 2:23 26:18,20 27:2 109:11 lend 179:6 leon 5:9 letter 52:4 67:15 119:2,3,20 120:5,7 120:18 121:9,10 122:23,23 179:12 letters 49:10 119:24 level 21:6,8 43:19 76:4 77:20 79:6,9 79:10 99:2,7,23 100:6,14,18 101:6 101:9,12,16 142:7 167:22 173:3 180:20,23 181:2 181:15 187:23 levels 162:8 182:25 187:15,19 187:24,24 levine 3:9 5:16,18 9:5 29:17 30:6,12 35:23 39:4,8,13 47:15 56:25 57:3 101:20 102:7,8 108:5 141:15,17 158:6 164:6,10 168:2 174:13,20 177:9,21 178:8 179:7,9 181:4 183:10 184:3,8,11 195:11 199:16 201:8 203:4 lewis 1:18 3:6 liberties 2:15 7:19 license 68:14 lies 90:6 likelihood 65:21	limited 127:21 line 106:2 205:5 list 26:12,14 117:7 164:25 166:18,19 listed 11:5 lists 34:13,15 159:16 literature 86:23 litigation 20:8,13 25:11 104:16 little 134:11,12 live 12:9 llama 12:12 llp 1:18 2:6 3:6 loewen 104:14 114:24 long 12:16,18 114:13 look 9:14 29:18 30:2 45:17 55:21 61:14 94:5 97:14 108:16 109:23 110:19 116:20 117:6 119:10 130:12 141:22 143:18 145:17 151:18 155:22 157:15 175:21 185:4 188:3 looking 49:18 51:3 54:23 55:24,25 60:6,20 63:25 64:5 94:19 112:25 113:17 115:5 117:9 118:7 130:2 130:18 141:19 144:16 148:10 151:8 160:22 163:24 165:21 182:20 183:7
I	law 7:13 lawyer 104:17 lead 11:24 97:5 179:10 184:4 195:9 leaders 51:5,25 52:2,8 leads 116:24 117:8 leave 12:17 82:23 175:3 lefkowitz 130:13 130:15,22 131:23 132:13,18 133:7 133:18,25 135:16 135:18		

[looks - middle]

Page 18

looks 165:25 166:13 lose 89:20 125:14 losing 116:23 126:18 127:4 losman 94:6 102:24 103:9,14 lost 123:13 149:12 157:12 185:14 186:4 lot 141:3 low 51:17 131:16 141:7 lower 51:5 52:8 79:21 145:11 181:15 lozenges 8:13 luncheon 101:22 lw.com 2:10	making 100:11 man 152:24 154:14 manigo 160:25 161:19 162:4 163:3 175:23 176:2,3 manure 11:9,15 12:6,11,13,20 mapping 35:18 maraluz 64:9 75:16 129:13,18 183:23 margaret 64:14,22 65:3 92:23 93:3,7 93:22 margin 175:24 176:3,15 183:3,9 183:12,17,21 margins 112:12 mark 9:5 29:18 108:5 158:6 160:24 161:11 162:19 163:3 175:23,25 marked 9:9,11,16 9:21 29:22,25 30:17 40:24 61:16 102:13 108:9,16 158:10,13 164:20 marriage 202:17 maryellen 3:17 match 36:12,15 159:2,8 material 92:4 materials 91:15,21 matter 57:16,25 60:16 82:22 98:24 202:19 maximum 65:21	mean 13:5 17:10 17:11 18:3,4 19:14 20:7 23:14 24:3 27:23 31:17 34:6,7,12,24 37:4 40:4,23 47:23 48:13,15,16 49:7 49:14 50:16 52:2 54:18 59:15,25 62:11 65:11 66:5 66:7 69:16,20,23 70:6 73:4 78:23 78:24 81:18 82:24 83:7,13,20 91:10 91:19,25 92:9 96:25 106:17 107:14 112:18 116:23 124:11,12 125:21 131:7 136:23 142:16 143:7 147:14 150:7 162:20 165:19,20 174:21 180:19 182:15 187:24 191:12,20 195:16,23 meaning 58:16 140:16 147:16 191:13 means 62:20 75:6 77:19 79:6 131:8 192:22 meant 107:23 120:16 168:13 196:8 measure 73:7,11 75:12 76:9 190:6 192:7 195:19,21 196:15 measurement 13:15 15:3 99:3,8	99:25 100:7 105:20 measures 72:7,24 73:4,16 76:17 88:24 105:21 177:3,7 196:18 medicaid 181:7 medicare 181:7 medicated 12:14 medication 11:20 medications 8:11 meetings 49:9 member 61:19 members 50:19,21 51:19,21 121:6 membership 50:15,17 memory 14:20 meningeal 11:17 mentioned 88:22 182:13 messaging 117:21 method 65:20 82:9 86:21 87:3,9 165:4 methodically 95:9 methodologically 138:5 157:18 methodologies 87:3 methodology 65:18,22 85:11 87:5 95:14 114:6 138:3 methods 95:16 104:16 164:25 170:17,20 mid 2:24 middle 6:23 62:6 108:25
m			
m 3:9 68:6 120:9 magnitude 176:9 192:11 193:16 main 45:23 46:2 48:11 50:24 71:2 138:21,23 139:14 169:25 maintaining 51:6 major 109:12 majorities 58:16 58:17 majority 47:3 57:10,11 58:8 59:10,11,23,24 60:3,4 142:3,10,13 142:17 143:5 149:4,6 153:7,9 makeup 35:4,10 35:21 48:9 87:24 88:3,14 89:7			

[mind - objection]

Page 19

mind 81:6 179:8 mine 30:19 minority 49:23 90:3 117:17,18 120:2 121:25 122:12 178:7 191:16 minus 115:18 minute 164:7 minutes 56:22 mirrors 13:23 missed 140:9 missing 132:20 mississippi 11:16 mistaken 43:8 198:25 199:4 mitigated 150:25 mixed 82:9 87:2 model 78:4 modest 109:11 modifications 68:6 mods 68:5 moment 9:14 30:2 59:4 monica 3:22 monica.connell 3:23 monthly 11:20 months 10:22 morales 144:3,14 144:23 145:10 155:20 156:3 morehouse 16:16 morgan 1:18 3:6 morganlewis.com 3:12,13,14 morning 5:17 8:9 8:12 137:24 moses 64:3 92:19 102:22 103:8	motion 172:8 motions 203:11 move 8:25 12:25 14:13 56:7 135:14 moving 17:12 54:6 62:15 85:10 multiple 14:3 34:4 58:22,23 148:7,8 167:4 176:25 180:7 mutually 123:23 124:8,11	140:2 143:5 147:4 163:16 191:24 192:23,25 193:20 194:17,22 195:2,3 197:13 198:9,14 necessary 101:8 171:3 188:23 204:5 need 8:2 15:20 32:12 35:3 59:20 69:2,5,6,7,8 93:18 97:13 107:3 179:11 needed 71:19,25 needs 142:6 neither 110:23 neurological 11:19 never 189:17 new 1:2,19,19,21 2:8,8,15,17,17 3:18,21,21 5:8 7:19 53:2 87:23 202:3,5,7 news 87:17 newspaper 118:24 newspapers 49:10 nh 62:16,23 63:7 non 62:19 63:3,15 64:2,8,13,21 65:2 75:15 81:24 83:15 84:8 85:14,15 93:21 94:3,25 95:5,21 102:21 103:3,12,19 127:14 128:13 177:24 north 113:11 northeast 11:6 notary 1:21 4:17 5:13 201:19 202:6	note 9:11 noted 102:3 201:11 204:12 206:10 notice 1:20 number 9:13 27:4 29:13 69:14,24 98:23 131:20 133:5,7,9 136:20 142:9 175:15 numbers 63:22 75:3 86:5,6,7 132:10 159:8 nw 2:24 3:7 nyclu 7:20 nyclu.org 2:19 nysed 88:2,2 177:22
	n		o
	n 5:11 88:2 102:2 102:2,2,4 120:9 203:2 naacp 179:17 204:1 205:1 206:1 name 5:3,18,22 18:15 67:8 named 64:9,14 146:10 names 34:15,16,17 35:13 53:24 natasha 144:2,13 144:22 145:10 156:3 nathan 94:5 102:24 103:9,14 national 1:3 native 111:6 nature 13:12 15:11 77:6 nearly 146:24 necessarily 78:22 79:3 86:25 91:3 91:12 92:3 96:12 96:17,18,24 97:2 97:12 99:18 100:13 123:23 126:2 132:3,10		o 5:11 68:6 102:2 102:2,2,4 oath 6:10 obama 188:11 object 6:24 30:7 objection 14:4 19:8 22:2 27:16 33:3 36:20 37:18 38:22 39:17 40:22 41:4 45:22 47:14 47:16 52:17,21 57:20 64:16,23 71:15 82:2 95:12 100:20 101:14 115:15 123:25 134:8 140:15 160:12 174:13,20 177:9,21 178:8 179:7,9 181:4 183:10 184:3 197:5,17 199:13

[objections - particular]

Page 20

objections 4:12 observations 117:14 124:21 obtain 68:17,18 71:24 99:2,7,23 100:6,18 101:12 102:19,25 103:18 obtained 68:21 obtaining 184:18 occurred 25:21 44:25 october 120:15 offered 21:24 office 3:18 offices 1:17 official 40:12 63:23 118:24 158:10,15,22 159:7,10,14 203:24 oh 172:13 181:19 okay 18:8 23:17 24:18 27:11 35:12 39:13 45:8 70:3 82:14 84:6 88:19 101:3 110:19 122:21 124:18 164:9 190:12 201:4 once 12:17 113:25 125:10 191:20 ones 30:9 50:24 74:4 121:2 163:22 ongoing 19:10,11 20:25 online 10:20 op 178:20,23 179:6,14,20 open 31:18 68:3 operating 67:21	opine 18:17 22:8,9 22:13,21 27:7 46:23 opined 23:7,12 26:8,21 27:9 opining 44:25 45:8 opinion 7:14 18:6 21:24 37:13 46:7 46:10,19 47:9 48:19,23 101:11 116:16 150:17 168:14 opinions 31:21,24 33:6 40:25 41:7 45:20 185:2 opponent 156:18 156:19,20 opponents 156:17 opposite 116:25 125:14 order 11:18 175:15 199:25 ordinary 109:9 ordinate 109:25 organization 50:15,17,18 51:13 51:18 126:7 127:20 128:5 178:16 organizations 26:14 49:25 50:5 50:7,23 51:5,11,25 125:17,18,19,23 127:15,17 original 204:15 orthodox 91:10,13 91:19,25 92:6,9 outcome 105:14 105:20 113:3 114:5 150:24 151:8 192:9	196:20 202:18 outlined 126:11 output 70:21 73:15 74:10 140:7 140:10 171:6,20 196:24 outputs 171:25 172:4 outweigh 121:17 outweighed 193:21 outweighs 121:13 122:15 overall 84:2 119:6 172:12 overwhelming 150:4,5	131:5 141:21 143:19,19 151:19 151:19 164:20,21 164:23,23 175:20 177:12,15 182:21 185:5,5 188:3,5,6 203:3 205:5 pages 206:6 paid 185:20 paper 10:21 120:6 papers 10:17 paragraph 45:17 49:22 50:25 54:6 54:8 72:5,10,13,16 72:17,19,20 86:12 98:21 108:21,25 110:17 116:12,13 116:20 121:19 122:4,5,17 125:6 164:20,22,24 177:12,14 178:20 188:4,6 paraphrase 197:9 parasite 11:17 parent 118:9 park 1:18 parker 5:5,23 201:13 202:9 204:2 205:2 206:2 part 6:16 60:14 70:16,21 73:14 74:10 77:5 119:6 140:6 189:10 participate 12:2 participated 141:10 participation 187:23 particular 14:22 56:2,4 57:13,14 58:11 63:16 69:7
--	--	---	---

[particular - polarized]

Page 21

77:20 87:13 100:4 123:9 126:3 148:5 180:23 191:16 196:24 197:2 particularly 123:19 187:13 parties 4:7 6:24 202:16 patience 164:15 pattern 84:2 97:13 98:2,3,4 150:12 153:6 163:9 patterns 98:6 paying 199:12 peer 16:23,25 17:5 170:21 penalties 6:10 pennsylvania 3:7 penultimate 164:24 people 1:4 89:14 90:20 91:20 92:2 92:6,10 121:20 122:8 126:17 127:17 128:4 percent 54:25 55:2 55:8,9,11,12,17,17 56:5,7,15,16 57:16 57:18 58:3,4,10,10 62:10,16,23 64:8 64:13,20,25 75:15 79:9,19 81:24 82:17 83:2,9,15,22 84:7 92:20,22 93:2,6,21 94:8,12 94:16,21,25 95:5 95:15 107:18,19 109:24 110:2 115:8 130:21,24 131:23,24 132:11 132:18,19,20	133:2,13,17,22 134:7,12,12,14,15 134:23 135:6,17 135:24 136:7,18 136:20 142:23 143:4,21,22 144:2 144:9,13,17,22 145:7,11,22 146:3 148:12,18,22 151:22,25 152:3,8 152:12,19,21 154:4,10,20,21 155:9,12,23 156:2 156:10 160:23,24 161:6,7 162:22,24 176:6,8 178:2 183:25 percentage 63:3,7 63:14,25 69:8 85:13,14,15 86:3,4 86:5,6 94:2 95:9 95:20,21 96:15,22 97:22 98:13 102:20 103:2,11 103:19 104:6 107:13 123:7 130:18,21 142:25 145:20 151:21 152:6,11,18 161:15,18 164:3 176:4 196:6 percentages 97:24 132:22,23 134:6 155:17 162:10 perception 14:20 perfectly 8:3 perform 19:17,20 35:2 42:19 67:4 71:13,19 72:2 104:19 109:19 181:21 184:16	186:22 performed 62:2 66:15,21 84:17 97:8 113:20 114:7 115:11 143:15 160:18 172:24 173:5 175:2 188:19 189:24 190:18 performing 29:6 113:15 period 114:5 perjury 6:11 perry 2:18 person 90:25 pgrossman 2:19 ph.d. 1:17 2:5,14 5:5 9:8 29:22 30:23 201:13 202:9 203:16,19 204:2 205:2 206:2 phrase 51:9,24 66:20 75:4 90:12 90:14 91:5 phrased 26:3 71:22 pick 57:4 102:10 picking 36:2 piece 9:2 179:6 pieces 58:23 78:11 84:12 120:24 pierre 81:23 82:16 82:25 83:8,14,21 84:8 129:13,18 130:15 131:2,22 132:12,17 133:10 133:14 135:25 154:3,5,13,21 155:5 156:8 183:23	place 36:8,14 39:19 72:23 places 34:21 35:5 35:5,10,22 36:12 191:17 plaintiff 21:10 plaintiffs 1:6 2:4 2:13 7:22 21:12 21:15 33:12 38:3 38:6 39:11 108:13 plans 180:3 playing 57:23 please 5:3,21 6:9 6:16 30:2 204:4,9 plus 106:2 166:16 166:17 point 7:25 15:25 56:21 75:5,8,9,17 75:20 76:3,10 77:10 83:3 99:15 100:11 114:14 115:2 117:9 145:4 151:6 155:8 167:10 170:10 179:21 pointed 115:21 points 55:17 179:15 183:4 polarization 44:21 45:13 54:10,19 56:14 60:22 98:25 99:4,9,25 100:8 147:9 148:2,3 150:18 162:15 167:18 polarized 18:19 22:10,14,22 23:2 23:13,19 24:7,9,12 25:4,17,25 26:8,21 27:8,20 42:20 54:20 55:4,7,20
--	--	---	---

[polarized - proportion]

Page 22

56:15 57:10,15,19 58:6,12,15,24 59:12,14,18,21,22 60:3,13 61:8 65:23 82:4 83:19 88:13 113:6 117:10 123:3,5 127:8 129:23 130:3,5 139:8,16 149:8,21 162:12 175:11,18 177:3 181:22 182:4,11 187:15 188:10,17 192:11 195:22 196:3,16,23 political 35:7 56:8 125:18,22 politically 46:4,8 poll 167:23 polling 34:21 35:4 35:5,10,22 36:8,12 36:14 39:19 72:23 191:17 ponce 5:9 population 69:19 69:21 110:25 111:23,25 112:10 113:9,23 137:3 177:23,25 posed 88:20 positions 42:23 possibility 31:18 143:10 163:11 possible 98:7,11 106:7 116:2,6,9,10 124:16 145:5,8,9 145:12 163:19,19 169:2 190:17 191:7,13 192:13 192:20 199:6,7,8	potential 77:25 potentially 162:13 power 50:10,12 precinct 19:21 63:11,14 72:23 82:7 88:10 114:4 122:19 165:23 193:25 194:4,9 precincts 98:24 99:6,23 100:5 104:6 105:13,19 107:12 111:21 113:2 123:8 183:5 192:8 196:19 predict 166:13 prediction 105:24 166:2 predictor 107:18 137:4 prefer 117:19 195:6 preference 118:22 120:3 126:9 127:25 128:20 149:17 preferences 119:5 119:17 120:22 124:22 126:11,21 127:7 preferred 46:24 49:24 51:3 104:4 107:10,15,17,22 116:14,15,22 121:24,25 122:11 122:12 123:10,11 125:13,25 126:4 129:14,19 141:25 142:4,13,19 143:4 148:4 149:9,11 150:12 157:2 176:22 178:5,7	185:7,8,12,13,22 186:3,4 187:19,25 preliminary 29:20 30:22 31:16,17,20 168:13 203:18 premise 51:16 prepare 30:25 presence 111:5 present 11:5 12:22 13:2 14:2,6,14 24:10 27:12 presentations 16:3 presented 155:15 president 120:18 120:23 178:24 188:9 presidential 41:20 42:21 175:9,14 185:12 186:7,18 186:24 187:12 press 10:19 179:24 pretty 26:3 52:14 prevalent 82:10 prevent 8:15 11:18 previous 37:7 157:20 primary 11:6,13 11:21,23 14:16,18 47:23 print 30:9,12 prior 8:8,12 18:8 23:6 44:13,22 45:2,14 47:20 163:21 189:14 private 49:6 51:6 51:9 52:5,7,12,16 52:20 53:8,22 89:23 90:4,6 91:4 91:6,9,18,24 92:8 117:11,21,25	121:23 122:11 125:15 157:7 177:19,25 privilege 39:5 probably 55:13 92:7 141:12 151:16 probative 147:11 149:25 150:3,21 187:10,13,14 problems 166:25 process 97:4 produce 134:20 135:12 188:23 200:2 produced 80:13 168:23 171:23 produces 68:8 192:9 product 166:9 professional 18:6 professionally 87:5 professor 13:2,8 14:14,17 65:9,16 66:2,10 77:13 78:12 program 13:21 64:25 65:7 67:3,7 68:17,19,20 70:17 73:6 131:8 140:7 171:19 179:25 programs 107:6 project 12:21 projects 27:4 167:18 promises 179:25 promoting 90:5 prone 11:17 proportion 69:6,7 111:11
--	--	--	---

[proportions - racially]

Page 23

proportions 176:11 proposal 11:25 proposition 104:14 propounded 206:8 protect 127:3 provide 7:14 8:5 13:10 15:6 29:13 33:21 38:16 60:25 65:22 123:15 127:9,10 149:25 provided 27:25 28:3 32:20,22,24 33:2,5,9 34:3,11 35:9,14 36:4 37:11,22 39:2,23 40:5,12 43:6,9,11 43:20 71:12,19,23 108:13 provides 126:14 psychology 14:15 14:17,24,25 15:5 public 1:21 4:17 5:13 49:3,8,12,14 49:16,17,18 50:3,5 88:15 89:7,16,18 90:2,11,13,16,21 90:24 117:11,12 117:15,20 118:8 120:6 123:12 125:10 126:13 127:13,15 128:12 128:16 155:21 157:12 161:24 177:18,23 178:6 178:17 179:21 182:7 201:19 202:7 publications 10:16 13:17	publicized 124:23 124:25 publish 119:22 published 10:21 16:23,25 17:5 52:4 78:24 114:18 119:2 120:5 purpose 12:15 18:5 purposes 27:14 pursuant 1:19 put 76:3 107:4 155:16	110:4 111:16 124:3 128:20,22 129:2 160:10,14 160:18 164:16 172:16 174:23 178:10 185:19,21 185:24 190:2 191:2,4 197:18 questions 6:8,15 8:16,22 9:2 31:25 45:21,23 46:2 47:12,18,21,22,23 47:24 48:2,3,5 130:10 137:24 138:21 139:14 164:14 168:3,5,7 184:9,13 199:17 206:8 quick 35:23 quite 71:21 quote 118:8	racial 35:4,10,21 44:21 45:13 48:9 54:10,19 56:2,4,13 58:8 60:7,22 61:20 69:8 70:5,9 70:13,19 85:18,21 86:20 87:24 88:3 88:12,14 89:6 98:25 104:5 105:6 105:13,18 107:12 110:6,16 111:21 112:5,11,15 113:2 113:16,23 114:4 117:11 125:18,23 126:4 127:12,21 141:11 147:9,13 147:15,18,19,25 148:3,5 149:14 150:2,18 151:2,4 155:16 159:13 165:23 167:4,9,18 178:3,14 180:8,12 192:8 196:19 racially 18:19 22:10,13,21 23:2 23:13,19 24:7,9,12 25:4,17,25 26:8,21 27:8,20 42:19 54:20 55:7,20 56:14 57:10,19 58:6,12,15,24 59:12,14,18,21,22 60:2,12 61:7 65:23 82:4 83:19 88:12 113:6 123:3 123:5 127:8 129:23 139:7,16 149:8,21 175:10 175:18 177:3 181:21 182:3,11 187:15 188:10,17
	q qualified 116:18 qualify 90:21 qualifying 17:11 qualitative 82:8 82:12 quality 49:18 quantitative 61:10 82:12 88:8,11,23 98:18 123:15 127:9 160:9,17 170:17 177:6 question 4:13 6:17 6:18,19,23 7:2,8 8:4,5 14:5 15:21 18:9 20:11,12 22:6 23:6,8 26:3 26:24 37:8 39:14 44:11 45:9 46:3,7 46:13,17,22 47:7 52:14 54:13 57:4 59:2,7 60:15 65:13,15 66:6,17 71:22 77:23 78:7 78:9 82:13 85:11 88:20 89:6 100:9 102:9 103:7,9,16 105:11 108:24	r r 51:14 102:2 167:12 202:2 205:3,3 race 53:6 92:18 93:24 111:22 113:13 126:3 127:16 130:12,14 134:4 145:19 147:4,6,11 149:10 150:3,14,16,17,22 151:12 153:15,18 156:13 157:4,8,13 166:14 171:20 196:6 races 54:21 70:20 73:13,25 74:22 76:21 148:7,9 149:24	

[racially - relation]

Page 24

195:22 196:3,16 196:23 ramapo 1:8 3:4 5:20 27:21 33:17 40:17 41:2,23 42:2,5,8 44:3,22 45:2,13 48:21 50:11 52:13,16,20 53:8,22 91:11 118:9 120:22 126:9 169:25 175:12 178:25 186:10 187:21 188:8,14 ramirez 145:21 146:23 148:13 ran 66:18 69:10 155:20 157:6,11 159:12 randall 3:9 5:18 randall.levine 3:12 randomness 79:21 range 74:3,14,22 74:24 75:2 81:13 rarely 54:11 rate 141:10,10 rates 12:19 140:24 rbv 72:22 109:7,8 read 35:11 49:20 57:3,6 67:19 72:21 102:8,12 107:25 108:22 109:21 110:21 120:6 121:15 141:23 195:11,13 204:4 206:5 reading 72:10 122:3 125:5 129:5 reads 141:24	real 86:4,6,7 151:8 really 24:21 55:24 128:19 reanswer 197:23 reason 8:19 43:24 119:19 120:3 146:13 153:16,21 159:21 187:13 193:3 204:6 205:7 205:9,11,13,15,17 205:19,21,23 reasons 60:19,23 61:4 recall 19:12 24:23 25:2,20,23 26:7,19 27:3,6,9 29:12 39:22 44:14 53:3 68:2 74:17 75:2 81:8,11 90:14 140:14,18,20,22 140:23 141:2,4 169:22 170:11 179:13,19 190:22 190:25 191:3 193:9 receipt 204:16 receive 82:25 176:3 178:18 184:25 received 33:10 36:17 37:2 63:21 81:23 82:16 83:9 83:14,21 94:7 131:23 162:7 168:15 169:9,12 169:21 178:23 receives 142:3 receiving 142:10 142:13,16 147:22 147:24 169:7	recess 35:25 57:2 101:22 141:18 164:12 recognize 9:17,20 30:16 recognized 86:21 87:5 recollection 25:15 74:20,21 140:17 record 5:4,18,22 28:17 30:14 35:11 49:20 57:6,7 67:19 92:12,13 102:12 121:15 164:13 195:13 202:13 recorded 28:20 redirect 184:12 refer 78:25 91:24 122:17 reference 45:16 78:12,20 84:6 99:22 referencing 120:11 referred 74:15 101:4 169:24 referring 50:4,8 51:7,12 54:15 66:23 refers 61:21 120:14 reflect 32:6 83:18 174:15,18 183:8 192:14 reflected 31:22 170:18 186:12 reflection 196:21 reflective 173:4 reflects 84:4	refresh 6:6 refused 179:23 regard 83:12 127:6 157:13 regarding 86:14 87:7,16 181:25 regardless 127:16 149:10 157:8 region 2:24 registered 109:25 110:2 111:10 registration 33:22 33:24 34:8,11,12 35:12 38:17 110:23 111:4,19 113:13 regress 106:14 regression 19:23 104:3,20,25 105:5 105:8,23,25 106:9 106:12,16,22 107:10,16,23 109:10,11,20 110:9,13,14 112:13,15 113:21 114:3 132:7 165:6 165:9 166:6,12,20 167:7,12,13,14,17 167:25 regressions 107:20 reis 162:23 relate 13:18 14:23 138:21 related 40:25 41:7 53:16 69:18 113:6 162:14 163:17 202:16 relates 56:12 relation 120:17 173:25
--	--	---	--

[relationship - results]

Page 25

relationship 128:21 192:7	194:20	181:18 185:4	residents 182:7
relative 83:25 89:8	rephrase 6:17,18	188:3,19 189:12	residual 11:9,14
relatively 55:19	32:10 33:4 36:22	189:18 193:5	resolve 177:8
161:15	36:23 44:9 57:21	203:19,21	resolved 19:7 21:4
relevant 66:6 88:4	172:15 174:14	reported 1:23 62:5	21:5,7
88:16 127:24	183:11 197:25	73:19 92:15	respect 13:13
138:19 139:4,12	rephrasing 45:9	106:19 110:15	82:14 87:17,19
149:2 188:13	replace 35:24	117:22 171:8	88:4 93:24 111:16
reliability 146:18	replicable 170:24	189:9,13,17	115:17 123:19
174:16,19,22	188:19	reporter 5:2 61:24	130:3 139:8
reliable 96:5 116:3	replicate 171:3	203:25	185:16 188:14
116:5,8 119:16,20	188:24	reporting 63:19	190:19,21 197:12
120:2 123:20,22	report 12:3 18:22	64:7,12,19 106:16	respective 4:6
124:13,14,17	18:25 29:9,21	reports 62:12	respectively 184:2
129:10 134:4,13	30:22,25 31:3,7,15	121:6 171:23	respond 179:11
190:22 191:10,12	31:16,19,21,22	180:6,11,14	responded 179:5
191:15,18,21	32:9,13,17,25 33:7	represent 5:19 7:7	response 178:23
reliably 174:11	39:24 40:15,24	39:8 108:11	rest 93:19 134:17
relied 115:24	45:17,18 49:22	representative	199:12
182:17	54:7 61:3,15,25	87:11,15 182:14	restore 179:25
religion 53:15,17	62:18,25 63:12	182:16,18	result 63:13 76:5
religious 53:8,12	66:8 70:22,23	represented 7:4	83:23 115:13
53:14	72:5 73:16,22,22	requests 203:6,10	116:25 117:2
rely 36:17 100:13	74:3 75:15 76:23	required 71:12	132:7 153:17
100:14 114:2	76:25 77:6 82:5	77:5 142:12,18	154:8 172:7
119:11,13 129:12	83:4 85:12 86:12	184:15	180:15,22 197:3,7
149:18 193:16	90:13 91:7 92:16	requirement	resulted 159:22
relying 124:19	98:21 100:12	73:21	results 13:16 32:7
remain 195:15	102:14 103:23	requiring 111:14	34:9 39:24 40:3,5
remainder 51:2	106:15 107:7	143:5	40:9,13,16 58:25
132:2	108:8 115:3,21	research 11:7	60:20 61:2 62:18
remained 156:22	118:6,7 137:19,20	13:10,14 14:19,22	62:25 81:15,16,20
remember 26:10	138:13,20,24	15:2 31:13 48:6	82:20 83:5,6,18
27:5 43:23,25	139:5,11,13,25	48:14 79:11 82:8	84:3,13 92:15
44:10 141:9	141:22 149:17	82:13 113:5	93:13 97:12,15
repayment 181:15	158:4 159:16	167:20	98:18 105:2,23
repeat 18:8 26:24	163:25 164:19	researcher 104:4	109:12 114:2,22
59:6 64:17 71:16	166:18 168:14,15	107:11	115:5 116:8,13
83:11 100:2 103:5	170:18 171:12,15	reserved 4:13	117:5 124:5 127:9
124:3 160:14	171:24 172:3	residential 111:12	129:7 130:11
	175:21 177:13,15		132:5 157:5

[results - school]

Page 26

158:10,15,22 159:6,7,14,18 160:11,19,20 163:21 175:17 181:12,18 195:6 195:17,19,24,25 196:4,11 197:11 198:6,21 199:14 203:24 resumed 102:4 retained 7:10,13 7:17,18 17:14,18 18:5,12,17 19:17 20:14,17 21:11,15 21:17 24:5 25:3 26:15,20 27:13,18 39:12 74:11 140:10 170:4,6,12 171:2 172:18 187:3 188:21 200:3 203:25 retention 201:6 retentions 26:12 return 179:23 204:14 reveals 37:19 38:23 reversal 150:17 review 16:24,25 17:5 175:5 181:24 reviewed 52:25 53:4 80:12 91:15 169:8,12 170:21 richer 58:24 right 5:24 6:4 10:6 23:20,25 24:2 28:15 40:18 41:8 41:10 45:3,21 46:14 56:18,19 57:22 60:9 69:22 74:6 76:25 78:10	82:3 85:8,9 86:10 89:2 92:5 100:16 104:16 106:8,13 110:10 111:19 112:5,17 114:23 116:10 120:12,16 123:22,24 124:2,9 125:19 126:5,16 127:2,19 129:24 132:24 133:7,10 135:9,11,13 136:8 136:22 137:7 138:15 149:23 150:20 151:5,14 153:10,11 154:5,6 154:11,12,17,18 155:4,10,11,13,14 155:18,19,24,25 156:3,4,6 157:13 158:21 159:23 160:13,19 161:2,3 161:8,9 163:5,6,18 164:5 165:2,6,7 171:11 172:13 185:15,18,24 186:2,5,15,16 190:9 191:5 192:21,24 193:2 193:13,17 194:11 195:20 196:10,14 198:3,5 rights 17:15,19,21 109:4 127:2 172:12,19 189:20 river 11:17 road 5:8 robert 94:22 95:2 95:6 rockland 34:14 43:4 118:25 119:21,25	role 11:6,11 22:25 roll 111:4 romney 188:12 rothman 143:19 143:20,23 144:10 144:18 145:6 rough 24:17,21 row 158:23 160:22 rules 6:7 rulings 203:8 run 49:24 51:4 67:22 85:21 106:10,13 107:3,6 125:12 159:7,10 running 48:17 126:23 161:21,23 162:4,4,9,14 163:17 182:8 runs 103:24 rural 26:18,20 27:2	saw 53:13 77:10 162:16 saying 17:5 96:4 107:5 112:8 134:3 139:24 147:22 148:6 193:23 198:13,16,18 says 45:19 51:3 61:17,18 62:10,24 63:7,18 72:21 86:13 104:2 116:13 131:6 scenario 58:14,22 59:13 schneiderman 3:19 school 1:9 3:4 5:20 7:7 27:21 33:10 33:16 34:22 35:22 40:16,17 41:2,8,22 42:2,5,8,12,23 43:18 44:4,5 45:5 45:13 48:7,16,21 52:5,7 53:6 54:4 54:15 88:15 89:7 89:16,23 90:2,4,6 90:11,13,16,21,24 91:4,6,9,18,24 92:8 117:20,21,25 118:8,23 120:23 121:23 122:11 123:12 125:10 126:13 128:16 155:21 157:7,12 161:24 170:2 175:12,18,19 177:18,19,25 178:25 179:21 182:8 186:10,14 186:20 188:15
		s	
		s 5:11 51:14 68:6 88:2 102:2,2,2,4 s.p. 203:4 sabrina 130:15,25 131:22 132:17 133:10,14 135:25 sake 157:16 sample 75:10 79:21 87:11,15 99:16,20 100:12 182:14,16,17 samples 12:2 save 117:12 124:24 125:2,16 126:8,17 127:3,5 127:20,22 128:5 128:21 saved 71:8	

[schooling - smaller]

Page 27

schooling 178:6 schools 48:9 49:4 49:6,8,13,14,16,17 49:19 50:3,5 51:7 51:9 52:13,16,20 53:8,9,12,14,22 87:24 88:4,15 89:18 90:3,7 117:12,13 124:24 125:2,15,17 126:8 126:17 127:3,5,13 127:16,20,22 128:5,13,15,21 177:24 178:4,14 178:17 science 79:10 180:24 sciences 79:19 scientific 115:23 sealing 4:8 search 119:7 seat 64:3 92:19 94:5,19 102:22,24 103:7,9,14,16 115:6 130:13 135:15 143:18,20 145:17 151:19 154:3 155:5,22 161:4,14 162:21 seats 162:16 second 14:20 46:13 60:14 72:20 156:19 194:3 section 17:20,24 18:13 19:25 20:4 22:16 25:11 see 32:10 36:11,14 59:20 62:7 64:4 72:9 86:15 92:4 99:4 104:7,11 109:2 121:5	158:23 164:7 197:2,23 seeing 109:5 seeks 104:4 107:11 seen 54:11 150:9 150:11 158:16 segment 43:17 semesters 16:20 sense 106:6 198:2 sentence 51:2 54:8 72:20 86:13 103:24 104:2 107:9 109:21 116:12 117:10 121:19 122:4 164:24 sentences 108:23 separate 121:3 167:15 177:3 separately 85:22 106:18,20 143:13 separates 121:3 separating 56:13 serta 51:14,15 117:13 124:24 125:2,17 serve 7:10,21 17:14,18 18:12 20:14,17 23:23 27:13 served 17:24 19:24 20:5 23:11 25:10 26:6 services 26:18,20 27:2 serving 11:12 set 58:24 74:8 75:11 79:20 85:21 129:10 137:23 163:25 197:20 202:11,21	sets 88:11 89:10 setting 79:3 89:25 setup 104:25 seven 52:23 severe 11:19 162:15 share 165:24 166:14 192:16 shared 139:21 sheet 204:7,10,12 204:15 206:11 short 159:25 show 26:16 49:23 109:12 129:12,17 showed 115:17 shown 167:20 sic 125:8 179:17 sided 125:10 sign 204:9 signature 202:23 206:14 signed 4:16,18 52:4 significance 99:3,8 99:24 100:7,14,19 100:22,24 101:4,7 101:10,13,17,19 102:20,25 103:10 103:18 180:19,21 181:2 significant 99:19 115:14,20 125:3 131:17 193:13,19 significantly 161:11 186:13,19 signing 204:11 similar 91:8 121:5 150:12 176:18 simplistic 60:6 simply 112:25 114:3	single 14:8 61:5 104:3,19 105:7 107:10,16,23 109:10,19 110:8 110:12,14 112:13 112:14 113:21 114:3 165:5,9,13 166:5,19 167:6,10 167:14,17,20,24 185:9 sit 10:24 46:11,20 47:10 116:16 140:13 184:24 sites 182:18 situation 54:24 60:11,12 89:15 148:6 situations 24:8 112:22 150:11 six 54:9,14 117:23 121:20 122:7 size 99:16,20 100:12 193:15 skipped 179:17 slate 48:18,25 49:16 89:16 90:5 117:20,25 121:23 125:9 126:23 155:21,21 161:23 162:5,9 163:4,16 178:5 182:8 slates 48:24 89:22 117:21 121:3 slating 48:7,8,15 48:20 small 43:17,22 44:2 80:14 98:23 133:4 142:25 smaller 131:20 161:18
--	--	--	--

[social - suite]

Page 28

social 79:10,18 115:23 180:24 software 67:3,7,25 68:3,6,9,11,12,23 69:3 77:13 solomon 145:18 solutions 2:23 someplace 74:12 somewhat 111:13 163:10 sorry 72:14,18 100:25 120:16 127:10,18 175:22 185:7 201:4 sort 84:23,25 85:2 199:19 sorts 95:17,18 sound 164:10 sounds 164:5,11 171:11 172:13 source 40:8 68:3 118:21 119:4,16 119:20,25 120:21 sources 34:4 49:23 97:14 118:24 125:7 southeast 120:7 southern 1:2 space 204:7 speak 118:10 specific 15:20 22:5 24:23 25:21,23 26:7,10 29:12 61:14 74:4 78:19 84:6 99:21 109:7 140:20 142:7 180:3 191:4 192:9 specifically 43:23 45:16 53:4 97:16 189:5,23 190:19 190:24	specification 111:15 specifics 27:3,5 spent 29:9 split 55:15 56:8,9 spoken 91:16 spring 1:5 square 82:21 squares 166:15 ss 202:4 stand 63:9 standard 73:8,22 73:24 74:8,15,22 76:12 77:9,15,24 78:21,25 79:10 80:12,21 83:24 135:8 140:6,10 145:14 166:10 171:6,13,16 174:2 174:4,5,7,9,15,18 174:24 175:5 189:9,12 stands 63:10 67:12 start 14:21 28:9 starting 92:18 108:24 118:3 141:24 state 1:21 3:18 5:3 5:21 20:8 49:23 53:2 54:8 87:23 180:22 202:3,7 204:6 statement 174:12 states 1:2 78:2 stating 54:7 statistical 13:15 15:4,9,12 16:3,24 17:2,6 19:17,19 65:20,21 72:8,24 73:5,9,11,17 99:2 99:7,24 100:6,14	100:18,22,24 101:4,6,10,12,17 102:19,25 103:10 103:18 111:14 115:13 180:18,21 181:2 statistically 99:18 115:14,20 193:12 193:18 statistics 14:19,23 15:18,24 16:2,5,8 16:10 step 106:9 steps 65:14 steve 33:13,14,15 33:18,20,23 34:10 35:9 36:4,18 37:2 37:11,17 38:2,6,10 38:13,16,20 39:6,9 39:10,15 146:4,24 148:19 169:7 steven 1:16 2:5,14 5:5,23 9:8 29:21 30:22 201:13 202:9 203:16,19 204:2 205:2 206:2 sticking 135:15 stipulated 4:5,11 4:15 stipulations 4:2 stopping 56:21 story 182:5 straight 106:2 street 2:16,24 35:19 strength 192:7 196:18 strike 96:8 146:21 161:10 173:9 174:8,16 175:3,6,7 175:24 177:13	178:18 180:9 183:19 strikes 163:8 strong 56:9 98:24 99:17 student 15:17 177:19,19 students 128:17 studied 15:5 studies 14:3 15:16 167:23 study 11:25 12:15 12:18,18 14:3,9,12 14:17 82:10 studying 13:19,20 sub 30:10 subject 6:10 112:19 195:15 204:11 subscribed 201:15 subsequent 31:19 120:25 substance 206:10 substantial 142:15 subtract 132:7 subtracted 69:24 successful 116:15 126:24,25 sufficient 42:13 99:6,23 100:5 suggest 47:23 114:21 153:13 156:25 157:5 186:17 suggested 119:9 suggests 97:11,16 116:22 117:17 123:6 151:10 154:19 suite 2:24
--	--	---	--

[sum - theresa]

Page 29

sum 194:19,24 197:10 summarize 47:21 summarizes 61:25 summary 61:19 102:16 supplement 122:15 129:10 supplemental 82:8 84:4 86:13,17,22 87:6,15,20,22 89:12 97:17 116:21,24 117:4,7 120:24 121:12 122:20,22 123:14 124:18 125:3 126:11 127:10,24 160:9,16 177:7 181:24 182:6,14 184:23 194:10 195:9 support 13:16 49:15,16,25 50:10 51:4,6 56:2,5 58:2 58:4,18 89:16,24 95:10,21,22 109:13,14 123:9 125:9,23 126:12 126:13 142:8,15 145:6,10 146:12 146:14 147:23,24 154:23 156:7,22 157:11 159:13 162:8 163:15 178:18 182:7,22 187:21 191:16 192:15,17 196:6 197:15 198:10 supported 47:2 48:25 49:2,5 89:23 123:12	149:5,6 152:18,22 155:24 157:7,8 161:18 supporter 156:3 supporters 49:17 supporting 58:9 60:8 126:23 127:15 161:16 162:23,25 188:12 supportive 49:3,6 49:7,14 50:5 51:9 58:12 175:17 suppose 65:13 sure 18:10 19:15 23:9 25:8 26:17 32:3 33:25 36:24 44:18 56:24 103:6 105:16 109:22 113:11,13 151:16 184:21 surrounded 37:25 suspicious 179:22 sustainable 11:7 switch 27:11 sworn 4:18 5:13 201:15 202:11 system 67:21,23 systematically 182:19	35:23 45:17 55:16 56:23,25 61:14 65:13 78:10 101:20 108:16 110:19 118:2 130:12 132:14 141:22 151:18 157:15 164:6 172:13 182:5 185:4 taken 28:7 35:25 57:2 141:18 164:12 takes 12:16 talk 45:25 talking 15:22 45:4 58:20,22 72:15,17 79:16 tallies 63:23 tasks 29:5 taught 16:4,8 taxes 51:6,17 52:8 taxpayers 120:8 teach 15:18,23 16:10,21 teacher 13:5 teaching 13:22 15:25 teachings 54:5 technical 199:19 technique 32:16 62:3,13 65:10,17 66:3,11,13 67:5 78:15 79:2 115:8 techniques 19:20 65:20 111:15 technology 35:18 tell 6:16 15:11 38:20 39:15 70:4 70:6,8 119:11 174:24,25 177:17	196:5 tells 126:8 ten 16:22 20:19 35:21 50:10,13 99:6,16,22 100:5 100:12 142:22 tend 147:10 tended 141:9 tension 177:8 term 53:18 73:8 79:5 157:11 180:18 182:15 terms 48:2 87:2 98:18 113:25 125:3 164:17 167:13 168:20 182:22 183:13,18 183:22 testified 5:14 23:18 50:4 51:8 76:13 89:4 102:5 123:18 140:8 157:17 169:6,20 170:3 172:10,10 172:17 177:2 180:6 181:20 testify 18:20 20:20 20:22 170:10 171:5,18 testifying 6:11 18:6 170:7,12 testimony 56:11 172:24 193:22 197:9 202:13 thank 164:14 172:21 201:9 theater 13:3,8,19 14:9 thereabouts 114:8 theresa 1:20,24 202:6,25
	t t 3:19 5:11 51:14 102:2,4 202:2,2 205:3 tab 9:19 table 61:18,24 62:5,7 85:12 158:20 175:20 176:13 182:21 185:5 186:13 take 8:2,6,11 9:14 29:18 30:2,2		

[thing - understand]

Page 30

thing 50:6 157:18 191:22 199:19 things 49:11 117:6 190:6 195:20 think 8:20 32:12 32:21 38:19 50:9 67:14 74:24 83:3 89:10,11 113:17 114:24 116:7 126:7 139:23 158:18 159:25 162:7 178:4 184:25 191:25 193:3 198:12,22 198:24 199:2,3,5 third 2:7 46:22 156:20 165:4 thirty 204:16 three 18:14 45:20 45:23,25 47:22 48:5 88:7,11 112:5 113:23 118:24 130:14 139:14,15 143:11 143:14 145:19 156:22 157:6,10 163:4 164:25 170:19,20 176:14 177:2 182:24 threshold 101:9 101:16 throat 8:13 tied 163:16 tight 81:14 83:25 time 4:14 16:7 17:23 18:11 25:2 25:19 28:17,20 29:6 32:14,18 38:7 80:23 102:3 114:13 141:13 149:15 167:11	170:7,8 174:17 178:11 185:3 197:10,22,24 201:10,11 timeout 35:24 times 6:22 24:15 24:19,22,22 25:10 25:13,16 26:5 38:12,15 66:14,17 118:25 119:21,25 title 31:20 62:9 titled 31:15 today 6:9,15,22 7:5,21 8:2,17 10:24 46:11,20 47:10 116:17 140:13 184:24 tools 13:15 15:3 top 11:3 45:18 61:18 74:5 103:25 108:17 151:19 164:23 total 69:5,14,15,25 86:8 142:9 183:13 183:18,22 totally 186:9 totals 34:7 63:20 85:24 131:20 159:9,10,17 183:7 183:8 186:12,14 town 43:3,6,8,10 43:19 towns 43:3 track 159:25 trade 29:15 training 15:8,12 tramondo 1:20,24 202:6,25 transcript 204:17 204:18	transcription 206:7 treated 8:14 trial 4:14 trick 55:18 true 75:12 121:18 125:14 156:16,23 185:10 194:6 202:12 trustee 158:9,14 203:23 truthful 8:21 truthfully 8:16 try 51:17 178:10 197:9 trying 127:5 tuck 64:15,22 65:3 92:23 93:3,7,22 turn 61:15 86:3,11 102:14 103:22 116:11 118:3 130:8 141:20 164:19 175:20 176:12 177:11,14 185:5 turned 140:24 turning 11:2 21:23 44:3 50:25 92:14 102:13 115:3 129:2 178:19 turnout 69:8,13,23 70:5,9,12,19 110:23 111:4,19 137:12,14 138:13 138:16,19,22,25 139:3,4,9,12,21,24 140:4,14,17,19 141:7 158:3 171:19,25 172:4 175:6 186:18,22 186:23,25 187:19	187:23 two 14:18 50:24 89:10 97:5 105:4 105:21 110:21 112:11,21 113:16 121:2,3 134:4 141:11 142:2,5,11 142:18 143:6 146:19 147:17,17 154:23 155:2 165:22,25 166:10 166:13 180:8,11 192:22 type 109:20 types 87:20 typically 49:2,5,15 75:10 171:15 172:3 182:7 189:12 typo 159:4,17 typos 159:5
u			
u.s. 41:19 175:9 188:9 um 198:15 unclear 47:18 uncontested 42:15 42:17 undergraduate 15:14 16:18 underlined 86:12 underlinings 30:19 underlying 78:3 underpinning 126:15 understand 6:12 6:14,20 7:2,8 8:6 17:4 22:3 36:21 56:11 59:19 60:15 91:23 105:16			

[understand - voters]

Page 31

123:17 125:16 127:5 134:10,13 161:22 162:3 174:8,10 190:2,3 191:23 understanding 30:18 54:3 79:8 90:17,22 118:15 118:18 178:13,15 181:10 understood 6:19 unfiled 26:13 union 2:15 7:19 unique 35:6 united 1:2 universities 16:15 university 11:8 13:4 14:15 15:15 16:12 unofficial 159:6,9 159:18 unreliable 199:11 update 10:4 updated 68:23 urban 104:17 use 30:9 34:18,25 35:8 66:10,12 67:3,21 76:10,12 76:18 77:24 79:5 82:11 84:19,22,23 87:11 90:13 91:6 105:5,23 107:17 110:24 111:18 112:14 157:11 167:19 174:5 180:10,25 199:25 useful 128:10 155:8 uses 166:12 usually 47:2 55:21 109:5,10,12	128:24 139:19 187:11 v v 5:11 102:4 204:1 205:1 206:1 vague 47:17 valley 1:5 valuable 177:8 value 75:12 101:18 115:18 181:2,12,17,18 vap 111:3 variable 107:18 111:2 112:2 113:10,22 167:3 variables 104:23 105:5 165:14,22 166:10,13 variation 156:12 various 105:2 verified 36:19 verify 36:3,9,25 37:5,13 veritext 2:23 vermont 11:8 version 67:24 versus 18:16 20:15 85:22,23,24 veterinary 12:8 victory 175:24 176:9,15 183:13 183:18,22 view 118:20 viewing 53:13 virginia 15:15 virtually 90:3,7 127:14 128:13 146:22 177:24 vitae 9:8 203:15 voketz 18:16	vote 54:21,25 55:3 56:16,17 57:12,17 57:18 59:11,24 60:4,16,23,23 63:20,23 85:24 86:8 107:19 110:2 117:25 123:20,21 124:6,7 128:14,15 128:17 131:20 132:18,19,20 133:13,17,24 141:9 142:23,24 150:4,6 155:6 158:9,14,23 159:17 161:12 163:2 165:24 166:14 183:3,7,8 184:2 186:12,14 203:23 voted 64:8,14,21 65:2 84:8 92:23 93:3,7,22 94:13,17 94:21 95:2,6 115:9 130:22,25 134:15,16 135:17 135:24 136:7,24 137:6,8,11 143:23 144:2,9,13,18,22 146:4,23,24 148:12,19,23 152:2,7,11 153:8,9 154:5,11,20,21 155:10,12,17 160:24,25 161:6,8 164:3 voter 33:22,23 34:7,8,11,12 95:10 95:20,22 105:14 114:4 118:22 119:5,17 120:3,22 124:21 126:9,21	127:7,25 128:20 144:16 146:11 148:11 185:7 187:20,23 190:21 192:9,15,17 194:12,14 196:20 198:10 voters 34:13,15,16 43:18 46:4,14,25 55:8,10,11,12 56:15,17 57:11,11 57:17,18 58:3,4,17 58:17 59:10,11,24 59:24 60:4,4,16,23 62:10,16,20,23 63:3,8,15 64:2,8 64:14,21 65:2 75:16 81:24 82:17 83:2,10,15,22 84:8 85:13,15,16 86:4,5 86:7 92:20,23 93:3,7,16,22 94:3 94:8,9,12,16,21 95:2,6,15 96:2,15 96:22 97:22,23,25 98:9,13 101:5,5 102:21 103:3,12 103:20 110:3 115:8 116:22 117:18,24 121:24 122:12 128:24 130:19,21,25 132:23 133:23 134:14,24 135:6 135:17,24 136:7 136:14,15,17,17 136:19,21,24 137:6,10 139:20 142:15 143:21,23 144:2,9,13,18,22 145:6,10,20 146:4
---	---	---	---

[voters - whites]

Page 32

146:23,24 147:5 147:13,23,25 148:12,18,22 149:4,6,25 150:4,5 150:13,15 151:7 151:11,21 152:2,6 152:11,18,22 153:7,9,14,24 154:5,10 155:12 155:17,23 156:2 156:10 157:3 160:23,25 161:6,7 161:16,18 162:23 162:25 164:3 175:16,19 176:16 178:7 188:8,11,12 190:20 191:8,10 193:11 194:5,18 194:22,24 195:8 197:13,15 198:8 198:20 199:10 votes 63:18,22 69:5,6,14,24 81:25 82:17 83:2,10,16 83:22 104:7 107:13 131:14,16 131:19 132:12,13 133:5,7,8,10 142:3 142:10,14,17,25 158:20 176:4 183:13,16,18,22 voting 17:15,19,20 18:19 23:18 24:7 24:9,12 25:5,17,25 26:9,22 27:8,21 42:20 47:3 54:12 54:20 55:8,9,10,11 55:13,20 58:13,16 58:24 59:13,14,19 61:8,20 62:10,17 62:23,24 63:4,8,15	64:2 65:24 69:18 69:21 75:16 82:5 83:19 85:13 86:20 88:12,13 89:14 92:20 94:8 96:23 97:22,23 98:10,13 102:21 103:3,12 103:20 104:16 105:6 106:4 109:4 110:6,16,24 111:23,24 112:10 112:15 113:7,9,22 123:3,5 127:2,8,12 128:24 130:19 134:24 135:6 137:3 138:22 139:8,16 143:21 145:20 149:9,21 150:13,15 151:21 162:12 167:9 172:11,19 175:11 175:18 177:4 181:22 182:4,11 187:16 188:17 189:20 192:11 195:22 196:3,16 196:23 vs 1:7	watkins 2:6 7:19 way 26:3,17 60:2,6 60:17,23 61:12 66:20 71:22 77:23 84:17 107:4 128:7 130:14 132:9 134:4 137:9 139:6 143:8,11,14,15 145:19 146:18 155:18 173:4 190:13 201:3 202:18 ways 82:5 we've 9:21 30:17 40:24 56:21 58:25 127:13 135:2 137:23 160:2 201:5 weak 55:19 56:6 weber 120:8 website 33:11 53:5 53:13 88:2 168:19 169:22 170:2 websites 40:10 169:22 weight 96:9,13,17 96:18 121:21 122:9,16,25 weighting 97:3 weissmandl 120:18,20 121:11 122:24 155:23,24 156:5,9 157:2 178:24 179:5 weissmandl's 179:14,20 went 10:19 whereof 202:20 white 33:13,14,15 33:18,20,23 34:10 35:9 36:4,18 37:3	37:11,17 38:2,6,10 38:13,16,20 39:6,9 39:10,15 47:3 51:3 55:8,10 56:15 57:11,17 58:3,17 59:10,23 60:3 62:23,23 63:3,7,15 85:16 86:7 90:7,20 91:2 93:22 94:12 95:2 97:20 101:5 106:4 109:6,13,13,14,24 112:6 116:14 121:24 122:12 127:14 128:13,24 129:19 139:20 144:16,18,22 146:4,25 147:2,19 147:22,23 148:11 148:12,18,19,22 149:4,7,16,16,20 149:20 150:3,6,11 152:18,21 153:3,7 153:10,24 154:4 154:10,23 155:12 155:17,23 156:2,5 156:10,18,21 157:3 161:19 169:7,9,13 176:16 176:22 177:24 178:2 182:22 183:3 185:7,8,13 185:21 186:4 187:20 188:12 194:6,7,12 whites 54:23,25 85:23 100:24 111:7,11,13 113:18 130:3,4 140:24 141:9 147:17 150:24
---	---	--	---

[whites - zero]

Page 33

154:20,21 155:6,9 161:17 wide 183:9 win 89:24 187:20 188:2 winning 121:22 122:10 182:22 witness 5:12 17:15 17:19,24 18:3,4,12 19:25 20:5,14 22:18,25 23:11 27:14 67:17 102:9 202:10,14,20 203:3 204:3 woman 154:17 156:19,20,21 162:24 women 153:3 won 176:7,22 183:3,24 185:8,13 185:22 186:3 wondering 163:7 word 67:15 108:24 190:8 wording 198:13 words 15:21 121:16 122:2 197:20 work 13:18 28:9 28:13,18 30:15 31:6 32:5 78:14 78:19 160:2 worked 22:17 28:24 29:2 working 12:21 29:9 30:8 59:18 60:21 worm 11:18,18 worth 41:2 199:12 write 80:25 81:3	writing 12:4 13:16 80:20 written 91:16 178:21 wrong 188:5 192:2 wrote 49:10 83:4 122:7	z
		zero 52:23
	x	
	x 1:3,10 109:24 203:2	
	y	
	y 88:2 105:25 109:25 166:16,17 yeah 198:4 201:2 years 18:14 20:19 25:6,7 41:2,6,18 42:11 54:11 68:22 78:16 82:11 84:16 84:18,21 85:4 180:2 yehuda 120:18,20 155:22,24 156:5,8 157:2 178:24 yeshiva 53:19 54:2 54:4 yeshivas 53:23,24 yield 181:11 yisroel 146:11 148:23 yonah 143:18,20 143:23 144:10,18 145:6 york 1:2,19,19,21 2:8,8,15,17,17 3:18,21,21 5:8 7:19 53:2 87:23 202:3,5,8 yorktown 5:8	